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\* \* \* \* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page for STN Seminar Schedule - N. America  
NEWS 2 DEC 01 ChemPort single article sales feature unavailable  
NEWS 3 JUN 01 CAS REGISTRY Source of Registration (SR) searching enhanced on STN  
NEWS 4 JUN 26 NUTRACEUT and PHARMAML no longer updated  
NEWS 5 JUN 29 IMSCOPROFILE now reloaded monthly  
NEWS 6 JUN 29 EPFULL adds Simultaneous Left and Right Truncation (SLART) to AB, MCLM, and TI fields  
NEWS 7 JUL 09 PATDPAFULL adds Simultaneous Left and Right Truncation (SLART) to AB, CLM, MCLM, and TI fields  
NEWS 8 JUL 14 USGENE enhances coverage of patent sequence location (PSL) data  
NEWS 9 JUL 27 CA/CAplus enhanced with new citing references  
NEWS 10 JUL 16 GBFULL adds patent backfile data to 1855  
NEWS 11 JUL 21 USGENE adds bibliographic and sequence information  
NEWS 12 JUL 28 EPFULL adds first-page images and applicant-cited references  
NEWS 13 JUL 28 INPADOCDB and INPAFAMDB add Russian legal status data  
\_ NEWS 14 AUG 10 Time limit for inactive STN sessions doubles to 40 minutes  
NEWS 15 AUG 18 COMPENDEX indexing changed for the Corporate Source (CS) field  
NEWS 16 AUG 24 ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced  
NEWS 17 AUG 24 CA/CAplus enhanced with legal status information for U.S. patents  
NEWS 18 SEP 09 50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY  
NEWS 19 SEP 11 WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,  
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

**NEWS HOURS** STN Operating Hours Plus Help Desk Availability  
**NEWS LOGIN** Welcome Banner and News Items

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\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* STN Columbus \* \* \* \* \* \* \* \* \* \* \*

FILE 'HOME' ENTERED AT 21:58:30 ON 28 SEP 2009

=> FILE REG	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.22	0.22

FILE 'REGISTRY' ENTERED AT 21:58:48 ON 28 SEP 2009  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6  
 DICTIONARY FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

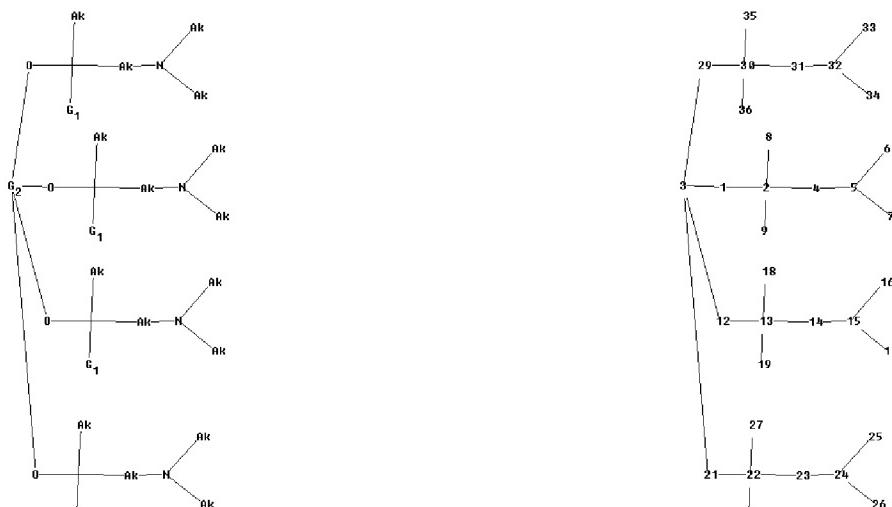
TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>  
 Uploading C:\TDH PTA\Application Examination\Series 10\10 588187\STN 10 588187 092809AA.str



chain nodes :  
 1 2 3 4 5 6 7 8 9 12 13 14 15 16 17 18 19 21 22 23 24 25 26  
 27 28 29 30 31 32 33 34 35 36

chain bonds :  
1-2 1-3 2-4 2-8 2-9 3-21 3-29 3-12 4-5 5-6 5-7 12-13 13-14 13-18 13-19  
14-15 15-16 15-17 21-22 22-23 22-27 22-28 23-24 24-25 24-26 29-30 30-31  
30-35 30-36 31-32 32-33 32-34  
exact/norm bonds :  
1-2 1-3 2-4 2-8 2-9 3-21 3-29 3-12 4-5 5-6 5-7 12-13 13-14 13-18 13-19  
14-15 15-16 15-17 21-22 22-23 22-27 22-28 23-24 24-25 24-26 29-30 30-31  
30-35 30-36 31-32 32-33 32-34

G1:H,Ak

G2:Si,Hf

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS  
21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS  
29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS

Element Count :

Node 4: Limited  
C,C1-20

Node 8: Limited  
C,C1-8

Node 14: Limited  
C,C1-20

Node 16: Limited  
C,C1-6

Node 17: Limited  
C,C1-6

Node 18: Limited  
C,C1-8

Node 23: Limited  
C,C1-20

Node 25: Limited  
C,C1-6

Node 27: Limited  
C,C1-8

Node 31: Limited  
C,C1-20

Node 33: Limited  
C,C1-6

Node 34: Limited  
C,C1-6

Node 35: Limited

C,C1-8

L1        STRUCTURE UPLOADED

=> D  
L1 HAS NO ANSWERS  
L1            STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> S L1 SSS SAM  
SAMPLE SEARCH INITIATED 21:59:46 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED -        758 TO ITERATE

100.0% PROCESSED        758 ITERATIONS                                  1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:    ONLINE    \*\*COMPLETE\*\*  
                            BATCH    \*\*COMPLETE\*\*  
PROJECTED ITERATIONS:        13509 TO        16811  
PROJECTED ANSWERS:            1 TO        80

L2        1 SEA SSS SAM L1

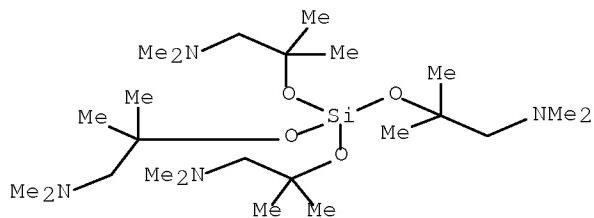
=> S L1 SSS FULL  
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FULL SCREEN SEARCH COMPLETED -        15802 TO ITERATE

100.0% PROCESSED        15802 ITERATIONS                                  5 ANSWERS  
SEARCH TIME: 00.00.01

L3        5 SEA SSS FUL L1

=> D L3 1-5

L3    ANSWER 1 OF 5 REGISTRY COPYRIGHT 2009 ACS on STN  
RN    864656-16-6 REGISTRY  
ED    Entered STN: 07 Oct 2005  
CN    Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)-1,1-dimethylethyl] ester  
      (9CI) (CA INDEX NAME)  
MF    C24 H56 N4 O4 Si  
SR    CA  
LC    STN Files: CA, CAPLUS, USPATFULL

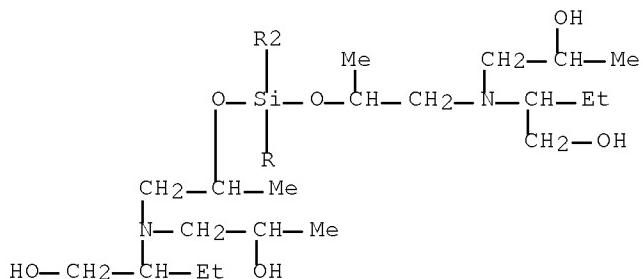


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

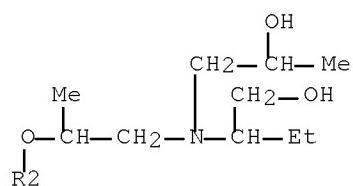
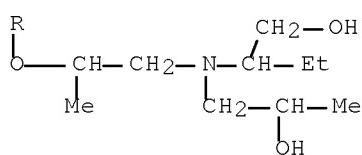
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 106713-00-2 REGISTRY  
ED Entered STN: 21 Feb 1987  
CN 2-Propanol, 1,1'-[{[1-(hydroxymethyl)propyl]imino}di-, silicate (7CI) (CA INDEX NAME)  
MF C40 H88 N4 O12 Si  
SR CA  
LC STN Files: CA, CAPLUS

PAGE 1-A



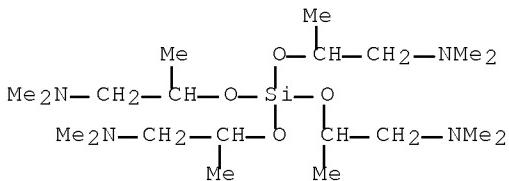
PAGE 2-A



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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

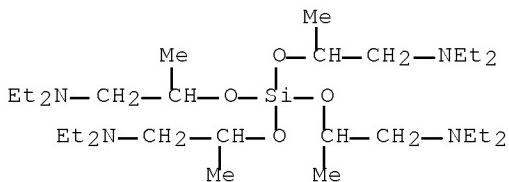
L3 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 28911-46-8 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Silicic acid (H<sub>4</sub>SiO<sub>4</sub>), tetrakis[2-(dimethylamino)-1-methylethyl] ester  
(9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 2-Propanol, 1-(dimethylamino)-, tetraester with silicic acid (H<sub>4</sub>SiO<sub>4</sub>)  
(8CI)  
MF C<sub>20</sub> H<sub>48</sub> N<sub>4</sub> O<sub>4</sub> Si  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, USPATFULL  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 18881-85-1 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN 2-Propanol, 1-(diethylamino)-, tetraester with silicic acid (H<sub>4</sub>SiO<sub>4</sub>) (8CI)  
(CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 2-Propanol, 1-(diethylamino)-, silicate (7CI)  
MF C<sub>28</sub> H<sub>64</sub> N<sub>4</sub> O<sub>4</sub> Si  
LC STN Files: BEILSTEIN\*, CA, CAPLUS  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 18843-94-2 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN 2-Pentanol, 5-(diethylamino)-, ester with silicic acid (H<sub>4</sub>SiO<sub>4</sub>) (4:1)  
(8CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 2-Pentanol, 5-(diethylamino)-, silicate (7CI)  
MF C36 H80 N4 O4 Si  
LC STN Files: BEILSTEIN\*, CA, CAPLUS  
(\*File contains numerically searchable property data)

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FILE STNGUIDE		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		197.57	197.79

FILE 'STNGUIDE' ENTERED AT 22:01:02 ON 28 SEP 2009  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Sep 25, 2009 (20090925/UP).



=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY	SESSION
	1.68	199.47

FILE 'CAPLUS' ENTERED AT 22:15:41 ON 28 SEP 2009  
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FILE COVERS 1907 - 28 Sep 2009 VOL 151 ISS 14  
 FILE LAST UPDATED: 27 Sep 2009 (20090927/ED)  
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009  
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

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This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

=> S L3  
 L4            8 L3

=> D L4 1-8 IBIB ABS HITSTR

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN	
ACCESSION NUMBER: 2006:513536 CAPLUS <u>Full-text</u>	
DOCUMENT NUMBER: 145:19143	
TITLE: Semiconductor device fabrication and substrate treatment apparatus	
INVENTOR(S): Sano, Atsushi; Horii, Sadayoshi; Itatani, Hideharu; Yamamoto, Katsuhiko	
PATENT ASSIGNEE(S): Hitachi Kokusai Electric Inc., Japan	
SOURCE: PCT Int. Appl., 27 pp.	
CODEN: PIXXD2	
DOCUMENT TYPE: Patent	

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006057400	A1	20060601	WO 2005-JP21855	20051129
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
US 20080032514	A1	20080207	US 2007-791222	20070629

PRIORITY APPLN. INFO.: JP 2004-344755 A 20041129  
WO 2005-JP21855 W 20051129

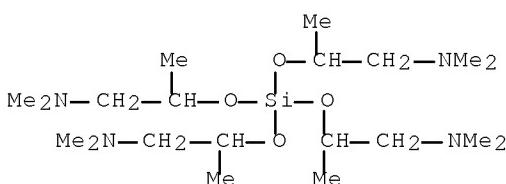
AB A high quality semiconductor device is manufd. by controlling the metal/Si concentration ratio in high-k metal silicate films. The process involves controlling the feed rate ratio between a metal-containing 1st reactant and a Si/N-containing 2nd reactant in a reaction chamber to control the metal/Si concentration ratio in the metal silicate film which is deposited on a substrate. The 1st and 2nd reactants may be Hf(OCMeCH<sub>2</sub>OMe)<sub>4</sub> and Si(OCHMeCH<sub>2</sub>NMe<sub>2</sub>)<sub>4</sub>, resp., for improved controlling in Hf/Si ratio, even varied concentration distribution through film thickness direction in the HfSiO films.

IT 28911-46-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(semiconductor device fabrication and substrate treatment apparatus by MOCVD deposition of hafnium silicate films)

RN 28911-46-8 CAPLUS

CN Silicic acid (H<sub>4</sub>SiO<sub>4</sub>), tetrakis[2-(dimethylamino)-1-methylethyl] ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1004690 CAPLUS Full-text

DOCUMENT NUMBER: 143:316927

TITLE: Alkoxide compound, raw material for thin film formation and process for producing thin film

INVENTOR(S): Sato, Hiroki; Sakurai, Atsushi

PATENT ASSIGNEE(S): Asahi Denka Co., Ltd., Japan

SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005085175	A1	20050915	WO 2005-JP2118	20050214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CN 1914150	A	20070214	CN 2005-80004018	20050214
DE 112005000134	T5	20070215	DE 2005-112005000134	20050214
US 20090035464	A1	20090205	US 2006-588187	20060802
KR 2006111694	A	20061027	KR 2006-716119	20060810
PRIORITY APPLN. INFO.:			JP 2004-41427	A 20040218
			WO 2005-JP2118	W 20050214

OTHER SOURCE(S): MARPAT 143:316927

AB An alkoxide compd. is described, that is represented by the following general formula  $M[OCR1R2ANR3R4]n$ , where one of R1 and R2 is a C1-C4 alkyl while the other is a H atom or C1-C4 alkyl; each of R3 and R4 is a C1-C4 alkyl; A is a C1-C8 alkanediyl; M is a Si or Hf atom; and n is 4, and is suitable to a raw material for thin film formation for use in a process of thin film formation though compound evaporation, such as CVD process. Further, there is provided a raw material for thin film formation comprising the above alkoxide compound Still further, there is provided a process for producing a thin film, comprising vaporizing the above raw material for thin film formation to thereby obtain a vapor containing the alkoxide compound, introducing the vapor onto a substratum, and performing decomposition and/or chemical reaction thereof to thereby form a thin film on the substratum.

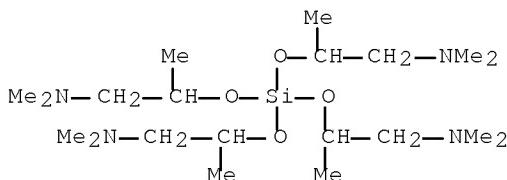
IT 28911-46-8P 864656-16-6P

RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

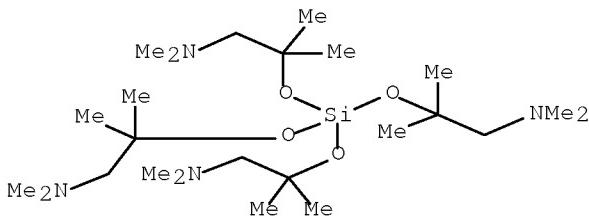
(alkoxide compound, raw material for thin film formation and process for producing thin film)

RN 28911-46-8 CAPLUS

CN Silicic acid (H<sub>4</sub>SiO<sub>4</sub>), tetrakis[2-(dimethylamino)-1-methylethyl] ester (9CI) (CA INDEX NAME)

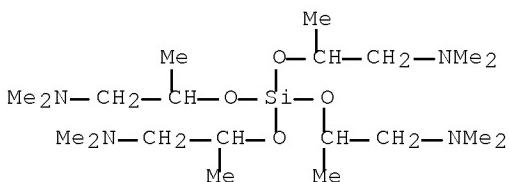


RN 864656-16-6 CAPLUS  
CN Silicic acid ( $H_4SiO_4$ ), tetrakis[2-(dimethylamino)-1,1-dimethylethyl] ester  
(9CI) (CA INDEX NAME)



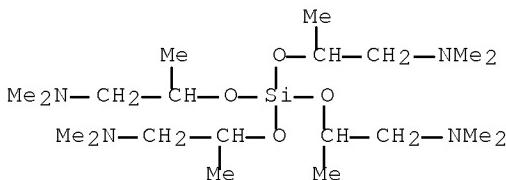
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1972:475256 CAPLUS Full-text  
DOCUMENT NUMBER: 77:75256  
ORIGINAL REFERENCE NO.: 77:12431a,12434a  
TITLE: Nitrogen-containing organosilicon compounds. XXXI.  
Silylation of aminopropanols and aminobutanols  
AUTHOR(S): Lukevics, E.; Liberts, L.  
CORPORATE SOURCE: Inst. Org. Synth., Riga, USSR  
SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija  
(1972), (2), 203-6  
CODEN: LZAKAM; ISSN: 0002-3248  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
AB Silylation of HOZNR<sub>2</sub> [Z = (CH<sub>2</sub>)<sub>3</sub>, CHMeCH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>CHMe, CH<sub>2</sub>CMe<sub>2</sub>; R = H, Me, Et] by (Me<sub>3</sub>Si)<sub>2</sub>NH (I), Me<sub>3</sub>SiNET<sub>2</sub> (II), hexamethylcyclotrisilazane, MeSi(OEt)<sub>3</sub>, MeSi(OBu)<sub>3</sub>, and Si(OEt)<sub>4</sub> in the presence of Na at 110-50° afforded the corresponding MenSi(OZNR<sub>2</sub>)<sub>4-n</sub> in 41.7-82.5% yield; similarly, (HOCH<sub>2</sub>)<sub>2</sub>CMeNH<sub>2</sub> and I gave 78.6% (Me<sub>3</sub>SiOCH<sub>2</sub>)<sub>2</sub>CMeNH<sub>2</sub> (III). Silylation of Me<sub>3</sub>SiOZNH<sub>2</sub> [Z = (CH<sub>2</sub>)<sub>3</sub>, CHMeCH<sub>2</sub>] and III by II gave the N, O-bis(trimethylsilyl) derivs. in 41.5-75.3% yield.  
IT 28911-46-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 28911-46-8 CAPLUS  
CN Silicic acid ( $H_4SiO_4$ ), tetrakis[2-(dimethylamino)-1-methylethyl] ester  
(9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1970:509835 CAPLUS Full-text  
DOCUMENT NUMBER: 73:109835

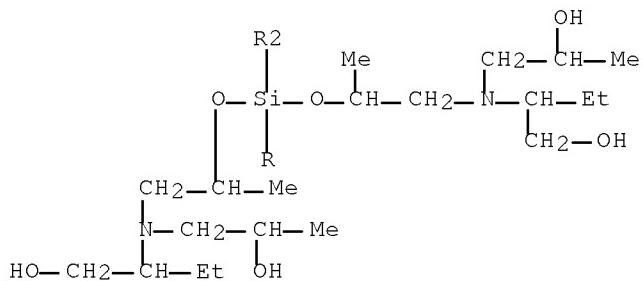
ORIGINAL REFERENCE NO.: 73:17883a,17886a  
 TITLE: Aminoalkoxysilanes. I. Amino derivatives of alkoxy-  
 and alkylalkoxysilanes  
 AUTHOR(S): Mehrotra, Ram C.; Bajaj, P.  
 CORPORATE SOURCE: Chem. Lab., Univ. Rajasthan, Jaipur, India  
 SOURCE: Journal of Organometallic Chemistry (1970), 24(3),  
 611-21  
 CODEN: JORCAI; ISSN: 0022-328X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB (Aminoalkoxy)silanes were prepd. by alcoholysis of tetraethoxymethyltriethoxy-  
 and dimethyldiethoxysilane with aminoalcs. in the presence of the  
 corresponding Na alcoholates. PMR and ir studies show that the compds. are  
 tetrahedral.  
 IT 28911-46-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 28911-46-8 CAPLUS  
 CN Silicic acid (H<sub>4</sub>SiO<sub>4</sub>), tetrakis[2-(dimethylamino)-1-methylethyl] ester  
 (9CI) (CA INDEX NAME)



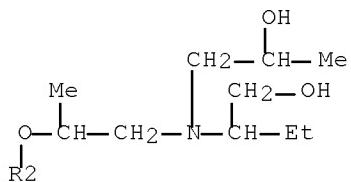
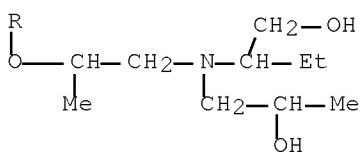
OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
 (6 CITINGS)

L4 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1962:475393 CAPLUS Full-text  
 DOCUMENT NUMBER: 57:75393  
 ORIGINAL REFERENCE NO.: 57:14922i,14923a  
 TITLE: Reactions of aminoalkyl silicates with oxirane  
 compounds  
 AUTHOR(S): Emblem, H. G.; Hurt, N. A.  
 SOURCE: Journal of Applied Chemistry (1962), 12, 366-73  
 CODEN: JACHAU; ISSN: 0021-8871  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB Ethanolamine polysilicate, prepd. from Et polysilicate and ethanolamine,  
 reacts with propylene oxide to give products which gel when mixed with H<sub>2</sub>O.  
 In contrast, products obtained by treating monoethanolamine orthosilicate or  
 2-aminobutyl orthosilicate with oxiranes are stable in aqueous solution If  
 the aminoalkyl silicate contains unsubstituted organic groups, a self-  
 condensation of the reaction product is possible. Properties and possible  
 structures are discussed.  
 IT 106713-00-2P, 2-Propanol,  
 1,1'-[1-(hydroxymethyl)propyl]imino]di-, silicate  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 106713-00-2 CAPLUS  
 CN 2-Propanol, 1,1'-[1-(hydroxymethyl)propyl]imino]di-, silicate (7CI) (CA  
 INDEX NAME)

PAGE 1-A



PAGE 2-A

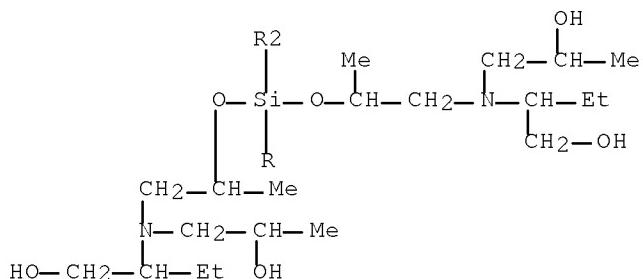


L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1962:475392 CAPLUS Full-text  
DOCUMENT NUMBER: 57:75392  
ORIGINAL REFERENCE NO.: 57:14922g-i  
TITLE: Synthesis and pharmacological effects of  
bis(trialkylammonium)alkanol carbonates  
AUTHOR(S): Pohoryles, Leo A.; Wislicki, L.; Sarel, Shalom  
CORPORATE SOURCE: Hebrew Univ., Jerusalem, Israel  
SOURCE: Journal of Pharmaceutical Sciences (1962), 51, 348-51  
CODEN: JPMSAE; ISSN: 0022-3549  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

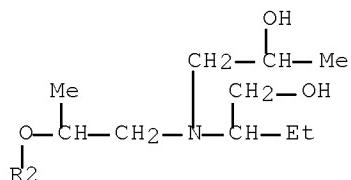
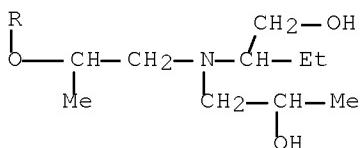
AB By the phosgenation of the appropriate  $\omega$ -dialkylaminoalkanol followed by the quaternization of the corresponding base by ?MeI, the following bis(trialkylammonium)alkyl carbonate diiodides were prepared (m.p. and yield given): trimethyl-ammoniummethyl (I), 203-5°, 50-60%; 1-trimethylammonium-2-propyl (II), 242°, 18%; 1-trimethylammonium3-propyl (III), 166-7°, 65%; 1-dimethylammonium-3propyl (IV), 189°, 40%; 1-diethylmethylammonium-3propyl (V), 197-9°, 60%; 1-trimethylammonium-4-butyl (VI), 186°, 57%; 1-trimethylammonium-4-butyl (VII), 280° (decomposition).. -. Blood pressure was lowered without affecting the muscle twitch by I. Neuromuscular transmission and direct muscle excitability were depressed by VI, III, and I in that order. All effects were weaker in II, IV, V and VII.

IT 106713-00-2P, 2-Propanol,  
 1,1'-[ [1-(hydroxymethyl)propyl]imino]di-, silicate  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 106713-00-2 CAPLUS  
 CN 2-Propanol, 1,1'-[ [1-(hydroxymethyl)propyl]imino]di-, silicate (7CI) (CA  
 INDEX NAME)

PAGE 1-A



PAGE 2-A



L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1962:18394 CAPLUS Full-text  
 DOCUMENT NUMBER: 56:18394  
 ORIGINAL REFERENCE NO.: 56:3502d-g  
 TITLE: Silanol esters of inorganic acids. IV. Sulfation of  
 alkylsiloxanes with halosulfuric acids and esters  
 Schmidt, Max; Schmidbaur, Hubert  
 Univ. Munich, Germany  
 Chemische Berichte (1961), 94, 2446-50  
 CODEN: CHBEAM; ISSN: 0009-2940  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB cf. CA 54, 15225e.-Alkylsiloxanes are sulfated by ClSO<sub>3</sub>H (I) to alkylsilyl  
 sulfates with the elimination of HCl. FSO<sub>3</sub>H (II) gives similarly  
 alkylfluorosilanes and pyrosulfuric acid. While alkyl chlorosulfates hardly  
 react with siloxanes, the silyl esters are strong sulfating agents which are

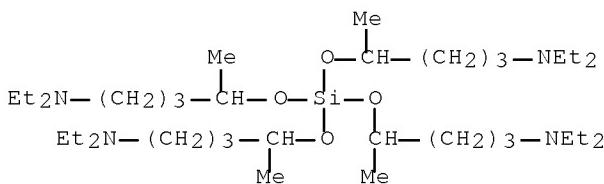
capable of converting siloxanes into alkylsilyl sulfates with the elimination of alkylchlorosilanes. I (11.6 g.) added with stirring at room temperature to 16.2 g. (Me<sub>3</sub>Si)<sub>2</sub>O(III) and the mixture heated 2 hrs. at 100° and evaporated in vacuo gave 19.8 g. (Me<sub>3</sub>SiO)<sub>2</sub>SO<sub>2</sub> (IV), m. 55-7°. I (16.5 g.) with 10.5 g. octamethylcyclotetrasiloxane (V) gave similarly 18.9 g. (Me<sub>2</sub>SiOSO<sub>3</sub>)<sub>2</sub> (VI), m. 100-16° (C<sub>6</sub>H<sub>6</sub>-petr. ether). III and ClSO<sub>3</sub>Me or ClSO<sub>3</sub>Et (equivalent amts.) refluxed several hrs. gave only very small amts. of alkyl chlorides. Me<sub>3</sub>SiO<sub>3</sub>SCl (5.25 g.) and 4.52 g. III mixed and then refluxed several hrs. gave 2.86 g. Me<sub>3</sub>SiCl, b. 55-6.5°, and 6.48 g. IV, b<sub>3</sub> 80-3°, m. 55-73°. Me<sub>2</sub>Si(O<sub>3</sub>SCl)<sub>2</sub> (8.65 g.) and 4.44 g. V yielded similarly 3.65 g. Me<sub>2</sub>SiCl<sub>2</sub> and 9.35 g. VI, m. 103-18° b<sub>0.1</sub> 145-8°. III (6.1 g.) treated dropwise with stirring with 15.6 g. II and heated 3.5 hrs. at 80° gave 5.55 g. Me<sub>3</sub>Sif, b<sub>72.5</sub>, 12-14.5°; the residue consisted of II, SO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, and H<sub>2</sub>SO<sub>4</sub>-silyl esters.

IT 18843-94-2

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 18843-94-2 CAPLUS

CN 2-Pentanol, 5-(diethylamino)-, ester with silicic acid (H<sub>4</sub>SiO<sub>4</sub>) (4:1) (8CI) (CA INDEX NAME)



L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1962:18393 CAPLUS Full-text

DOCUMENT NUMBER: 56:18393

ORIGINAL REFERENCE NO.: 56:3502c-d

TITLE: Silicate esters and related compounds

AUTHOR(S): Abbott, A. Doyle; Wright, James R.; Goldschmidt, Alfred; Stewart, William T.; Bolt, Robert O.

CORPORATE SOURCE: California Research Corp., Richmond

SOURCE: Journal of Chemical and Engineering Data (1961), 6, 437-42

CODEN: JCEAAX; ISSN: 0021-9568

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

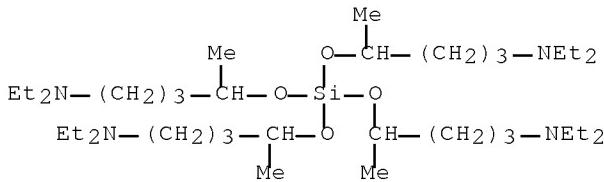
AB -Data are given for phys. and chem. properties of 49 tetraalkoxysilanes, hexaaikoxydisilanes, polyalkoxysiloxanes, and bis(trialkoxysilyl) ethanes, phys. properties of 20 silicate derivs. of aliphatic and aromatic diols, and 9 miscellaneous silicate derivs. A discussion of hydrolytic stability is given.

IT 18843-94-2

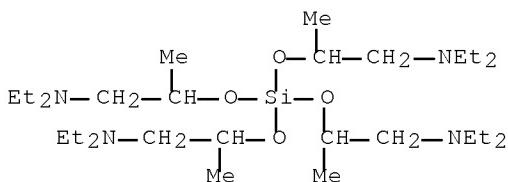
(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 18843-94-2 CAPLUS

CN 2-Pentanol, 5-(diethylamino)-, ester with silicic acid (H<sub>4</sub>SiO<sub>4</sub>) (4:1) (8CI) (CA INDEX NAME)



IT 18881-85-1, 2-Propanol, 1-(diethylamino)-, silicate  
     (properties of)  
 RN 18881-85-1 CAPLUS  
 CN 2-Propanol, 1-(diethylamino)-, tetraester with silicic acid (H<sub>4</sub>SiO<sub>4</sub>) (8CI)  
     (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
     (6 CITINGS)

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COST IN U.S. DOLLARS	SINCE FILE	TOTAL	
	ENTRY	SESSION	
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL	
	ENTRY	SESSION	
CA SUBSCRIBER PRICE	-6.56	-6.56	

FILE 'STNGUIDE' ENTERED AT 22:16:22 ON 28 SEP 2009  
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FILE CONTAINS CURRENT INFORMATION.  
 LAST RELOADED: Sep 25, 2009 (20090925/UP).

=> FILE REG			
COST IN U.S. DOLLARS	SINCE FILE	TOTAL	
	ENTRY	SESSION	
FULL ESTIMATED COST	1.40	246.49	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL	
	ENTRY	SESSION	
CA SUBSCRIBER PRICE	0.00	-6.56	

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STRUCTURE FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6  
DICTIONARY FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>  
Uploading C:\TDH PTA\Application Examination\Series 10\10 588187\STN\STN 10 588187  
092809AB.str



chain nodes :

1 2 3 4 5 6 7 8 9

chain bonds :

1-2 1-3 2-4 2-8 2-9 4-5 5-6 5-7

exact/norm bonds :

1-2 1-3 2-4 2-8 2-9 4-5 5-6 5-7

G1:H,Ak

G2:Si,Hf

G3:Hf,Zr

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

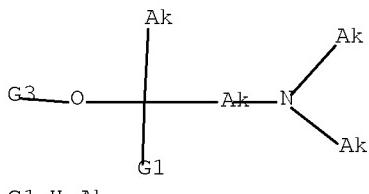
Element Count :

Node 4: Limited  
C,C1-20

Node 8: Limited  
C,C1-8

L5 STRUCTURE uploaded

=> D  
L5 HAS NO ANSWERS  
L5 STR



G1 H,Ak  
G2 Si,Hf  
G3 Hf,Zr

Structure attributes must be viewed using STN Express query preparation.

=> S L5 SSS SSAM

COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID

The query entered contains both search terms created by structure-building or screen commands and text search terms. L#s created via the STRUCTURE or SCREEN commands must be searched in the structures files separately from text terms or profiles. The L# answer sets from structure searches can be used in crossover searches and can be combined with text terms.

=> S L5 SSS SAM

SAMPLE SEARCH INITIATED 22:28:42 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 435 TO ITERATE

100.0% PROCESSED 435 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 7449 TO 9951

PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> S L5 SSS FULL

FULL SEARCH INITIATED 22:28:47 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 8689 TO ITERATE

100.0% PROCESSED 8689 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L7 0 SEA SSS FUL L5

=> FILE STNGUIDE		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST	185.88		432.37
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	0.00	ENTRY	SESSION
			-6.56

FILE 'STNGUIDE' ENTERED AT 22:28:59 ON 28 SEP 2009  
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FILE CONTAINS CURRENT INFORMATION.  
 LAST RELOADED: Sep 25, 2009 (20090925/UP).

=> FILE REG		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST	0.14		432.51
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	0.00	ENTRY	SESSION
			-6.56

FILE 'REGISTRY' ENTERED AT 22:30:15 ON 28 SEP 2009  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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Property values tagged with IC are from the ZIC/VINITI data file  
 provided by InfoChem.

STRUCTURE FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6  
 DICTIONARY FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
 predicted properties as well as tags indicating availability of  
 experimental property data in the original document. For information  
 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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 092809AC.str

G3-O-Ak-N 3-1-2-4

chain nodes :  
1 2 3 4  
chain bonds :  
1-2 1-3 2-4  
exact/norm bonds :  
1-2 1-3 2-4

G1:H,Ak

G2:Si,Hf

G3:Hf,Zr

Match level :  
1:CLASS 2:CLASS 3:CLASS 4:CLASS

L8 STRUCTURE UPLOADED

=> D  
L8 HAS NO ANSWERS  
L8 STR

G3-O-Ak-N  
G1 H, Ak  
G2 Si, Hf  
G3 Hf, Zr

Structure attributes must be viewed using STN Express query preparation.

=> S L8 SSS SAM  
SAMPLE SEARCH INITIATED 22:30:36 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 673 TO ITERATE

100.0% PROCESSED 673 ITERATIONS 3 ANSWERS  
SEARCH TIME: 00.00.01

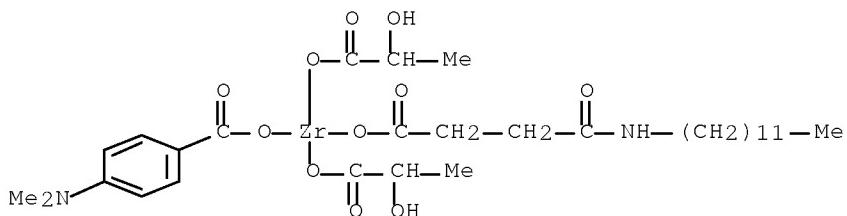
FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 11904 TO 15016  
PROJECTED ANSWERS: 3 TO 162

L9 3 SEA SSS SAM L8

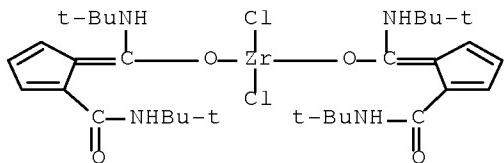
=> D SCAN

L9 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN Zirconium, [4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O1]bis(2-hydroxypropanoato-O1)-, (T-4)- (9CI)  
MF C31 H50 N2 O11 Zr



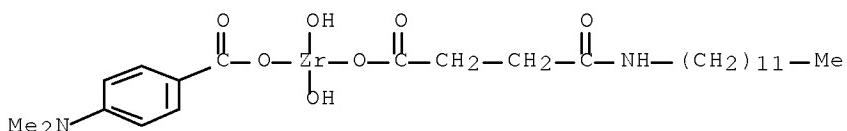
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L9 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN Zirconium, dichlorobis[N-(1,1-dimethylethyl)-5-[(1,1-dimethylethyl)amino](hydroxy- $\kappa$ O)methylene]-1,3-cyclopentadiene-1-carboxamidato]-, (T-4)-  
MF C30 H46 Cl2 N4 O4 Zr



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L9 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN Zirconium, [4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O1]dihydroxy-, (T-4)- (9CI)  
MF C25 H42 N2 O7 Zr



ALL ANSWERS HAVE BEEN SCANNED

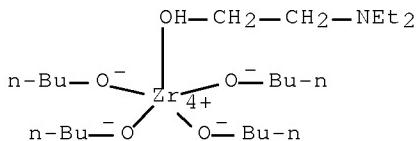
=> S L8 SSS FULL  
FULL SEARCH INITIATED 22:31:06 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 13411 TO ITERATE

100.0% PROCESSED 13411 ITERATIONS 33 ANSWERS  
SEARCH TIME: 00.00.01

L10 33 SEA SSS FUL L8

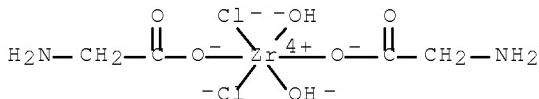
=> D L10 1-33

L10 ANSWER 1 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 783349-98-4 REGISTRY  
ED Entered STN: 18 Nov 2004  
CN Ethanol, 2-diethylamino-, compd. with Zr butoxide (6CI) (CA INDEX NAME)  
MF C22 H51 N O5 Zr  
CI CCS  
SR CAS EARLY REGISTRATIONS  
LC STN Files: CA, CAPLUS, USPATOLD



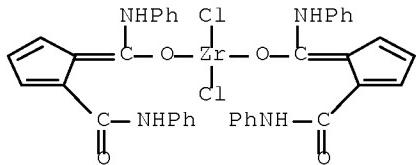
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 2 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 782398-18-9 REGISTRY  
ED Entered STN: 16 Nov 2004  
CN Zirconate(2-), dichlorobis(glycinato-O)dihydroxy- (9CI) (CA INDEX NAME)  
MF C4 H10 Cl2 N2 O6 Zr  
CI CCS, COM  
SR CA



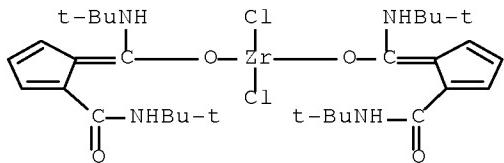
L10 ANSWER 3 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 233683-28-8 REGISTRY  
ED Entered STN: 19 Aug 1999  
CN Zirconium, dichlorobis[5-[ (hydroxy- $\kappa$ O) (phenylamino)methylene]-N-

MF phenyl-1,3-cyclopentadiene-1-carboxamidato]-, (T-4)- (CA INDEX NAME)  
C38 H30 Cl2 N4 O4 Zr  
SR CA  
LC STN Files: CA, CAPLUS



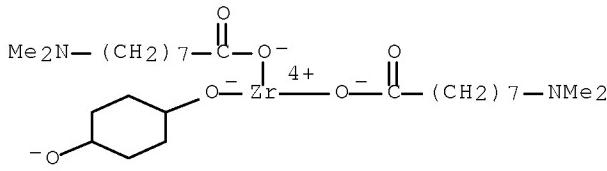
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 4 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 233683-27-7 REGISTRY  
ED Entered STN: 19 Aug 1999  
CN Zirconium, dichlorobis[N-(1,1-dimethylethyl)-5-[(1,1-dimethylethyl)amino]hydroxymethylene]-1,3-cyclopentadiene-1-carboxamidato]-, (T-4)- (CA INDEX NAME)  
MF C30 H46 Cl2 N4 O4 Zr  
SR CA  
LC STN Files: CA, CAPLUS



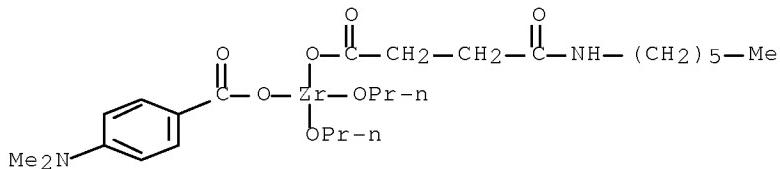
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 5 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 228718-22-7 REGISTRY  
ED Entered STN: 23 Jul 1999  
CN Zirconium, [1,4-cyclohexanediolato(2-)-κO]bis[8-(dimethylamino)octanoato-κO]- (CA INDEX NAME)  
MF C26 H50 N2 O6 Zr  
CI CCS  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER



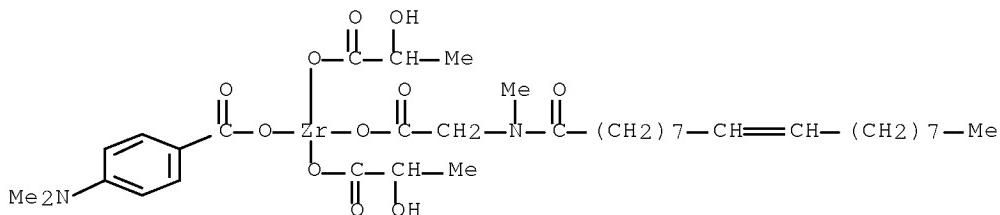
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 6 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 111318-96-8 REGISTRY  
ED Entered STN: 14 Nov 1987  
CN Zirconium, [4-(dimethylamino)benzoato-O] [4-(hexylamino)-4-oxobutanoato-O]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-(hexylamino)-4-oxo-, zirconium complex  
MF C25 H42 N2 O7 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



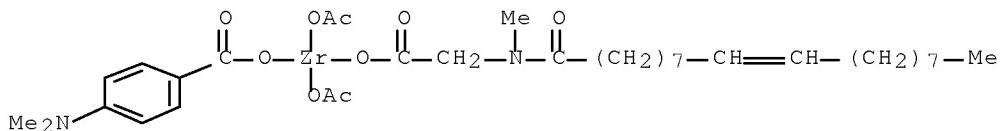
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 7 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110035-19-3 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, [4-(dimethylamino)benzoato-O]bis(2-hydroxypropanoato-O1) [N-methyl-N-(1-oxo-9-octadecenyl)glycinato-O1]-, [T-4-(Z)]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Glycine, N-methyl-N-(1-oxo-9-octadecenyl)-, zirconium complex, (Z)-  
CN Propanoic acid, 2-hydroxy-, zirconium complex  
MF C36 H58 N2 O11 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



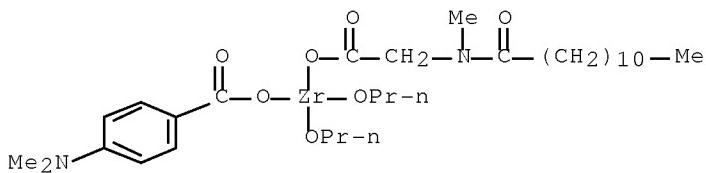
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 8 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110035-18-2 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, bis(acetato-O) [4-(dimethylamino)benzoato-O] [N-methyl-N-(1-oxo-9-octadecenyl)glycinato-O1]-, [T-4-(Z)]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Glycine, N-methyl-N-(1-oxo-9-octadecenyl)-, zirconium complex, (Z)-  
MF C34 H54 N2 O9 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 9 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110035-17-1 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, [4-(dimethylamino)benzoato-O] [N-methyl-N-(1-oxododecyl)glycinato-O1]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Glycine, N-methyl-N-(1-oxododecyl)-, zirconium complex  
MF C30 H52 N2 O7 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 10 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN

RN 110035-16-0 REGISTRY

ED Entered STN: 29 Aug 1987

CN Zirconium, [4-(dimethylamino)benzoato-O]bis(2-hydroxypropanoato-O1) [N-methyl-N-(1-oxododecyl)glycinato-O1]-, (T-4)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzoic acid, 4-(dimethylamino)-, zirconium complex

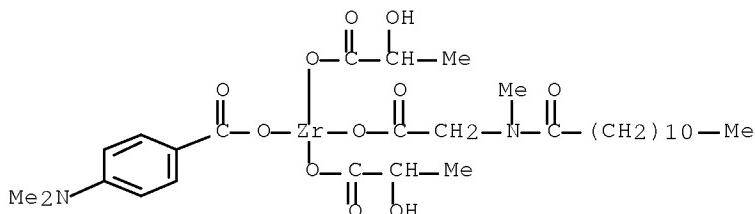
CN Glycine, N-methyl-N-(1-oxododecyl)-, zirconium complex

CN Propanoic acid, 2-hydroxy-, zirconium complex

MF C30 H48 N2 O11 Zr

SR CA

LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 11 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN

RN 110035-15-9 REGISTRY

ED Entered STN: 29 Aug 1987

CN Zirconium, bis(acetato-O) [4-(dimethylamino)benzoato-O] [N-methyl-N-(1-oxododecyl)glycinato-O1]-, (T-4)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

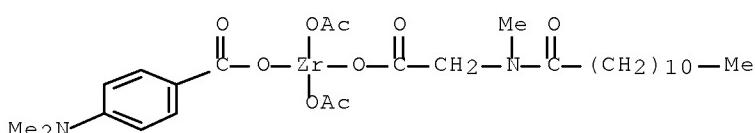
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex

CN Glycine, N-methyl-N-(1-oxododecyl)-, zirconium complex

MF C28 H44 N2 O9 Zr

SR CA

LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 12 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN

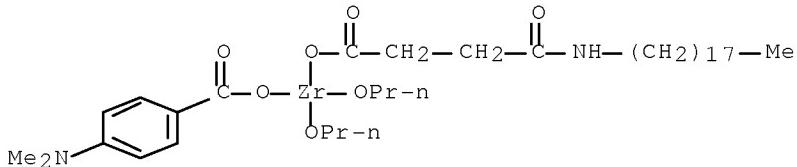
RN 110035-14-8 REGISTRY

ED Entered STN: 29 Aug 1987

CN Zirconium, [4-(dimethylamino)benzoato-O] [4-(octadecylamino)-4-oxobutanoato-O1]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)

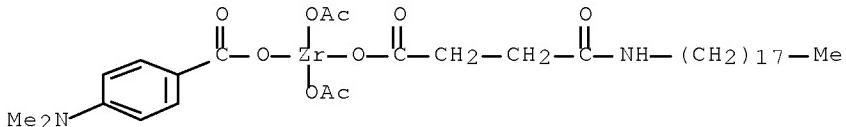
OTHER CA INDEX NAMES:

CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-(octadecylamino)-4-oxo-, zirconium complex  
MF C37 H66 N2 O7 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



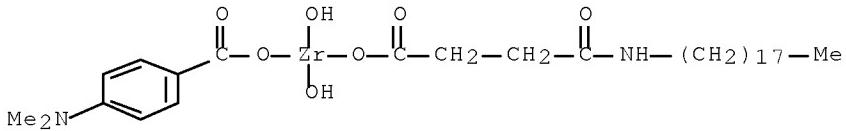
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 13 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110035-13-7 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][4-(octadecylamino)-4-oxobutanoato-O1]-, (T-4)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-(octadecylamino)-4-oxo-, zirconium complex  
MF C35 H58 N2 O9 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



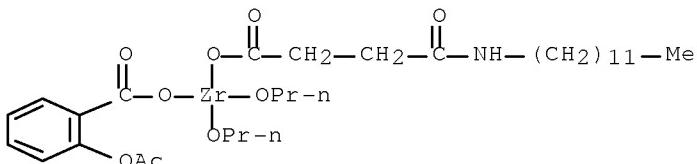
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 14 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110035-12-6 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, [4-(dimethylamino)benzoato-O]dihydroxy[4-(octadecylamino)-4-oxobutanoato-O1]-, (T-4)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-(octadecylamino)-4-oxo-, zirconium complex  
MF C31 H54 N2 O7 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



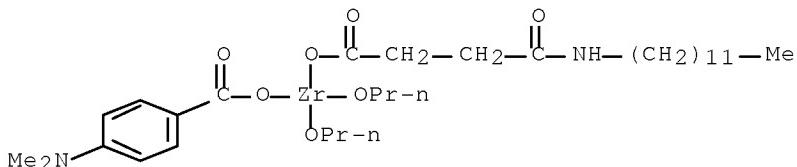
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 15 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 110035-11-5 REGISTRY  
 ED Entered STN: 29 Aug 1987  
 CN Zirconium, [2-(acetyloxy)benzoato-O] [4-(dodecylamino)-4-oxobutanoato-O1]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Benzoic acid, 2-(acetyloxy)-, zirconium complex  
 CN Butanoic acid, 4-(dodecylamino)-4-oxo-, zirconium complex  
 MF C31 H51 N O9 Zr  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

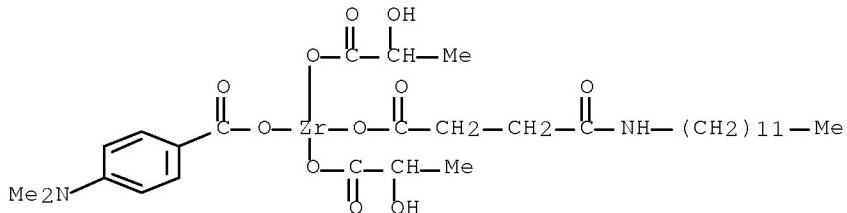
L10 ANSWER 16 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 110035-10-4 REGISTRY  
 ED Entered STN: 29 Aug 1987  
 CN Zirconium, [4-(dimethylamino)benzoato-O] [4-(dodecylamino)-4-oxobutanoato-O1]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
 CN Butanoic acid, 4-(dodecylamino)-4-oxo-, zirconium complex  
 MF C31 H54 N2 O7 Zr  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)

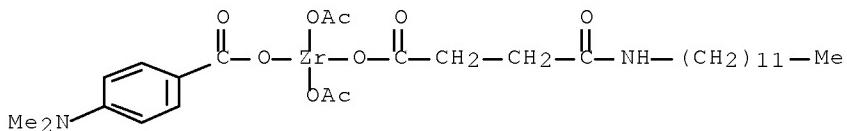
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 17 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 110035-09-1 REGISTRY  
 ED Entered STN: 29 Aug 1987  
 CN Zirconium, [4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O1]bis(2-hydroxypropanoato-01)-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
 CN Butanoic acid, 4-(dodecylamino)-4-oxo-, zirconium complex  
 CN Propanoic acid, 2-hydroxy-, zirconium complex  
 MF C31 H50 N2 O11 Zr  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)  
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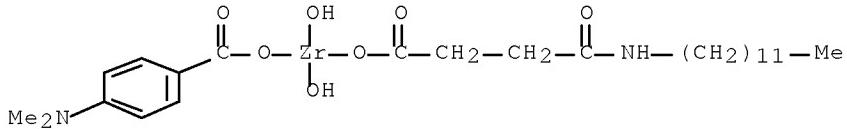
L10 ANSWER 18 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 110035-08-0 REGISTRY  
 ED Entered STN: 29 Aug 1987  
 CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O1]-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
 CN Butanoic acid, 4-(dodecylamino)-4-oxo-, zirconium complex  
 MF C29 H46 N2 O9 Zr  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

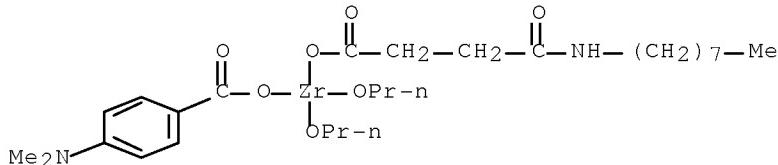
L10 ANSWER 19 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 110035-07-9 REGISTRY  
 ED Entered STN: 29 Aug 1987  
 CN Zirconium, [4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O1]dihydroxy-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:

CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-(dodecylamino)-4-oxo-, zirconium complex  
MF C25 H42 N2 O7 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



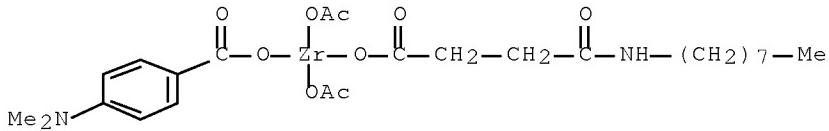
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 20 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110035-06-8 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, [4-(dimethylamino)benzoato-O][4-(octylamino)-4-oxobutanoato-O1]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-(octylamino)-4-oxo-, zirconium complex  
MF C27 H46 N2 O7 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



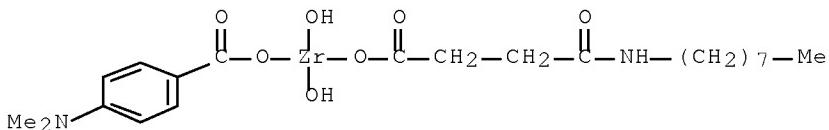
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 21 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110035-05-7 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][4-(octylamino)-4-oxobutanoato-O1]-, (T-4)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-(octylamino)-4-oxo-, zirconium complex  
MF C25 H38 N2 O9 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



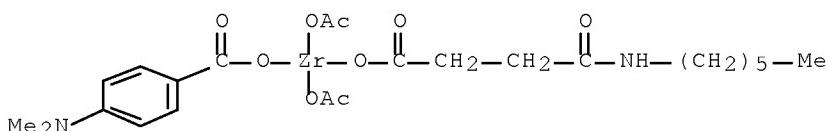
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 22 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 110035-04-6 REGISTRY  
 ED Entered STN: 29 Aug 1987  
 CN Zirconium, [4-(dimethylamino)benzoato-O]dihydroxy[4-(octylamino)-4-oxobutanoato-O1]-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
 CN Butanoic acid, 4-(octylamino)-4-oxo-, zirconium complex  
 MF C21 H34 N2 O7 Zr  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL



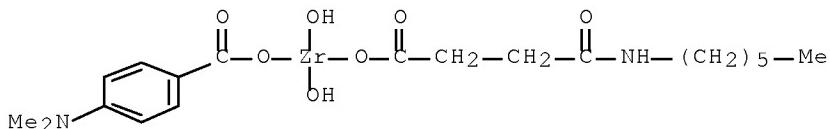
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 23 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 110035-03-5 REGISTRY  
 ED Entered STN: 29 Aug 1987  
 CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][4-(hexylamino)-4-oxobutanoato-O1]-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
 CN Butanoic acid, 4-(hexylamino)-4-oxo-, zirconium complex  
 MF C23 H34 N2 O9 Zr  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL



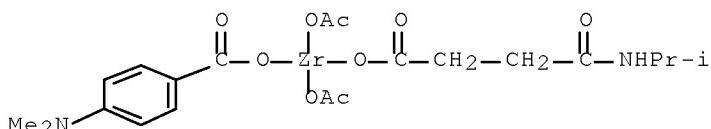
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 24 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110035-02-4 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, [4-(dimethylamino)benzoato-O] [4-(hexylamino)-4-oxobutanoato-O1]dihydroxy-, (T-4)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-(hexylamino)-4-oxo-, zirconium complex  
MF C19 H30 N2 O7 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



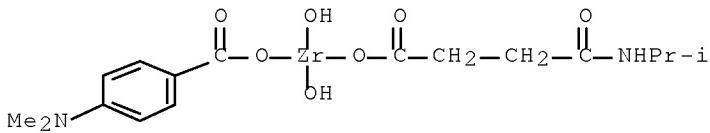
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 25 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110035-01-3 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, bis(acetato-O) [4-(dimethylamino)benzoato-O] [4-[(1-methylethyl)amino]-4-oxobutanoato-O1]-, (T-4)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-[(1-methylethyl)amino]-4-oxo-, zirconium complex  
MF C20 H28 N2 O9 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



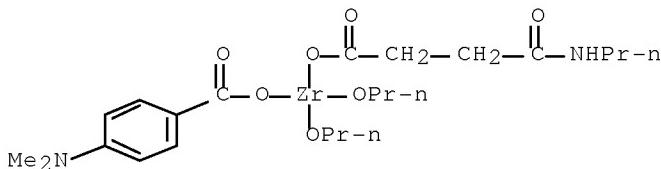
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 26 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110035-00-2 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, [4-(dimethylamino)benzoato-O]dihydroxy[4-[(1-methylethyl)amino]-4-oxobutanoato-O1]-, (T-4)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-[(1-methylethyl)amino]-4-oxo-, zirconium complex  
MF C16 H24 N2 O7 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



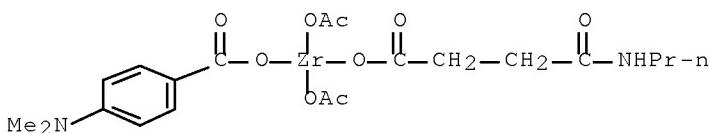
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 27 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 110034-99-6 REGISTRY  
 ED Entered STN: 29 Aug 1987  
 CN Zirconium, [4-(dimethylamino)benzoato-O][4-oxo-4-(propylamino)butanoato-O1]diproxy-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
 CN Butanoic acid, 4-oxo-4-(propylamino)-, zirconium complex  
 MF C22 H36 N2 O7 Zr  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL



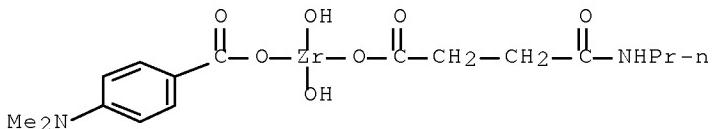
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 28 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 110034-98-5 REGISTRY  
 ED Entered STN: 29 Aug 1987  
 CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][4-oxo-4-(propylamino)butanoato-O1]-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
 CN Butanoic acid, 4-oxo-4-(propylamino)-, zirconium complex  
 MF C20 H28 N2 O9 Zr  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL



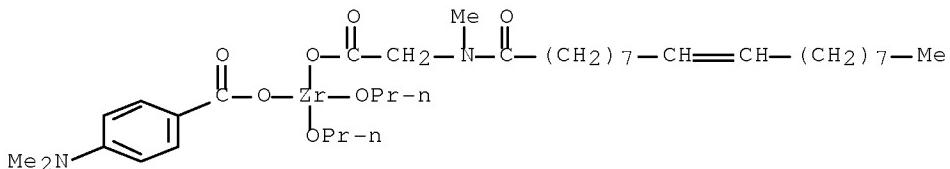
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 29 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110034-97-4 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, [4-(dimethylamino)benzoato-O]dihydroxy[4-oxo-4-(propylamino)butanoato-O1]-, (T-4)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Butanoic acid, 4-oxo-4-(propylamino)-, zirconium complex  
MF C16 H24 N2 O7 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

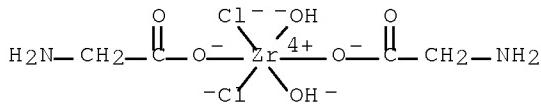
L10 ANSWER 30 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 110034-96-3 REGISTRY  
ED Entered STN: 29 Aug 1987  
CN Zirconium, [4-(dimethylamino)benzoato-O] [N-methyl-N-(1-oxo-9-octadecenyl)glycinato-O1]dipropoxy-, [T-4-(Z)]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex  
CN Glycine, N-methyl-N-(1-oxo-9-octadecenyl)-, zirconium complex, (Z)-  
MF C36 H62 N2 O7 Zr  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 31 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 69650-84-6 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Zirconate(2-), dichlorobis(glycinato-O)dihydroxy-, dihydrogen (9CI) (CA INDEX NAME)  
MF C4 H10 Cl2 N2 O6 Zr . 2 H  
CI CCS

LC STN Files: CA, CAPLUS  
CRN (782398-18-9)



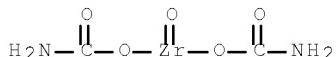
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1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 32 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 59596-23-5 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Zirconium, bis(carbamato-O)oxo-, homopolymer (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Carbamic acid, zirconium complex, homopolymer  
MF (C2 H4 N2 O5 Zr)x  
CI PMS  
PCT Polyether, Polyether only  
LC STN Files: CA, CAPLUS

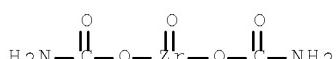
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CRN 59596-22-4  
CMF C2 H4 N2 O5 Zr



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 33 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 59596-22-4 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Zirconium, bis(carbamato-O)oxo- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Carbamic acid, zirconium complex  
MF C2 H4 N2 O5 Zr  
CI COM



=> FILE STNGUIDE		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST	254.01		686.52
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	0.00	ENTRY	SESSION
			-6.56

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=> FILE CASLINK		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST	0.49		687.01
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	0.00	ENTRY	SESSION
			-6.56

FILE 'CAPLUS' ENTERED AT 22:35:26 ON 28 SEP 2009  
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FILE COVERS 1907 - 28 Sep 2009 VOL 151 ISS 14  
 FILE LAST UPDATED: 27 Sep 2009 (20090927/ED)  
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009

FILE 'MARPAT' ENTERED AT 22:35:26 ON 28 SEP 2009  
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FILE CONTENT: 1961-PRESENT VOL 151 ISS 12 (20090925/ED)

FILE 'REGISTRY' ENTERED AT 22:35:26 ON 28 SEP 2009  
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STRUCTURE FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6  
 DICTIONARY FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6  
 TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

CLUSTER 'CASLINK' ENTERED

Predefined command sequences will be executed in  
 REGISTRY, MARPAT, and CAPLUS.

=>  
 Uploading C:\TDH PTA\Application Examination\Series 10\10 588187\STN\STN 10 588187  
 092809AD.str

Hf—0—Ak—N3—1—2—4

```
chain nodes :
1 2 3 4
chain bonds :
1-2 1-3 2-4
exact/norm bonds :
1-2 2-4
exact bonds :
1-3
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G1:H,Ak

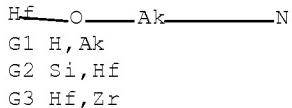
G2:Si,Hf

G3:Hf,Zr

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS

L11 STRUCTURE UPLOADED

=> D  
L11 HAS NO ANSWERS  
L11 STR



Structure attributes must be viewed using STN Express query preparation.

=> S L11 SSS SAM

S L11 SSS SAM FILE=REGISTRY  
SAMPLE SEARCH INITIATED 22:35:47 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 142 TO ITERATE

100.0% PROCESSED 142 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 2126 TO 3554  
PROJECTED ANSWERS: 0 TO 0

L12 0 SEA SSS SAM L11  
1 FILES SEARCHED...

S L12 SSS SAM FILE=MARPAT  
SAMPLE SEARCH INITIATED 22:35:47 FILE 'MARPAT'  
SAMPLE SCREEN SEARCH COMPLETED - 337 TO ITERATE

100.0% PROCESSED 337 ITERATIONS  
SEARCH TIME: 00.00.01

4 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 5646 TO 7834  
PROJECTED ANSWERS: 4 TO 200

L13 4 SEA SSS SAM L11  
1 FILES SEARCHED...

=> D SCAN

L13 4 ANSWERS MARPAT COPYRIGHT 2009 ACS on STN  
CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))  
Section cross-reference(s): 1, 63  
TI Heterocyclic organic compounds as tyrosine and serine-threonine kinase protein inhibitors for the treatment of in particular melanoma and their preparation  
ST pyrimidine tetrahydroquinoline prepn tyrosine serine threonine protein kinase inhibitor; treatment melanoma pyrimidine tetrahydroquinoline prepn  
IT EphB receptors  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(EphB4; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)  
IT Tyrosine kinase receptors  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(Tie-2; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)  
IT Endocrine system, disease  
(agents for treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)  
IT Antiarteriosclerotics  
(antiatherosclerotics; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)  
IT Antitumor agents  
(antibiotic; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)  
IT Mitosis  
(antimitotic agents; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)  
IT Antibiotics  
(antitumor; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)  
IT Nerve, disease  
(degeneration, chronic, treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)  
IT Retinal disease

(diabetic retinopathy, treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Animals  
(homoiothermic; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Suspensions  
(in oil; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Epidermal growth factor receptors  
Vascular endothelial growth factor receptors  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Proteins  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(kinase-like; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Retinal disease  
(macular degeneration, age-related, treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Headache  
(migraine, treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Alkylating agents, biological

- Analgesics
- Anti-inflammatory agents
- Antiandrogens
- Antiestrogens
- Antimigraine agents
- Antitumor agents
- Aromatase inhibitors
- Combination chemotherapy
- Cytotoxic agents
- Drug targets
- Human
- Metabolic pathways
- Mutation
- Nervous system agents
- Neuroprotective agents
- Oral drug delivery systems
- Pharmaceutical carriers
- Pharmaceutical solids
- Pharmaceutical suppositories
- Plasticizers
- Prodrugs
- Rectal drug delivery systems
- Signal transduction

(preparation of heterocyclic organic compds. as tyrosine and serine-threonine

kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Cyclin dependent kinase inhibitors

Eph receptors

Insulin-like growth factor receptors

c-Kit (protein)

neu (receptor)

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)

(preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Enzymes, biological studies

Receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Androgens

Coordination compounds

Estrogens

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Gelatins, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Disease, animal

(serine-threonine kinase and kinase-like proteins-dependent; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Injury

(trauma, neuro-, treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

as

tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Aging, animal

Angiogenesis

Atherosclerosis

Cardiac hypertrophy

Inflammation

Melanoma

Neoplasm

Pain

(treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Fibroblast growth factor receptors

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)

(type 1; preparation of heterocyclic organic compds. as tyrosine and

serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 950752-46-2P  
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(drug candidate and intermediate; preparation of heterocyclic organic compds.  
as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 443754-21-0P 950752-36-0P 950752-37-1P 950752-39-3P 950752-40-6P  
950752-42-8P 950752-44-0P 950752-47-3P 950752-54-2P 950752-56-4P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(drug candidate; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 9001-92-7, Proteinase 9039-48-9, Aromatase 9076-57-7 39391-18-9  
61229-81-0, Methionine aminopeptidase 62031-54-3, Fibroblast growth factor 140879-24-9, Proteasome 372092-80-3 386705-49-3, Vascular endothelial growth factor receptor kinase  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 52057-92-8P 158661-60-0P, 2-(3-Chlorophenylamino)pyrimidin-4-ol  
919836-53-6P 950752-48-4P 950752-51-9P 950752-52-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(intermediate; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

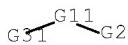
IT 9026-43-1 79079-06-4, Her-1 kinase 80449-02-1 88201-45-0, Protein kinase Ins-r 101463-26-7, PDGF-R kinase 137632-09-8, Her-2 kinase 138238-67-2, c-Abl kinase 138359-29-2, c-Kit kinase 139691-76-2, RAF kinase 141349-86-2, CDK2 kinase 141350-03-0, Flt-1 kinase 142243-02-5 144638-77-7, Flt-4 kinase 144697-16-5, B-RAF kinase 144697-17-6, c-Src kinase 146279-92-7, RET kinase 147230-71-5, Flt-3 kinase 148047-29-4, Tek receptor tyrosine kinase 150977-45-0, Kdr kinase 159606-08-3  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 9034-40-6, Luteinizing hormone-releasing factor  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 7440-06-4D, Platinum, complexes 51110-01-1D, Somatostatin, analogs  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and

combination therapy of diseases)  
IT 69-65-8, D-Mannitol  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(preparation of heterocyclic organic compds. as tyrosine and serine-threonine  
kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)  
IT 108-42-9, 3-Chloroaniline 108-91-8, Cyclohexylamine, reactions  
5751-20-2, 2-Methylsulfanylpyrimidin-4-ol 61468-43-7,  
1,2,3,4-Tetrahydroquinolin-5-ol 79668-76-1,  
3-(3-Chloropropoxy)phenylamine 158661-55-3, 2-Phenylaminopyrimidin-4-ol  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(starting material; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

MSTR 1



G2 = carbon chain (opt. substd. by (1-5) G7)  
G7 = 36 / 38



G8 = 51 / 53



G9 = 58 / 60



G11 = NH (opt. substd.)

G18 = heteroatom

Patent location: claim 1

Note: or pharmaceutically acceptable salts, esters, or prodrugs

Note: substitution is restricted

Note: additional heteroatom interruptions also claimed

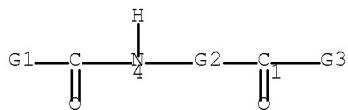
Note: also incorporates claim 78

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

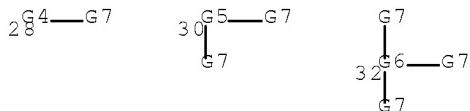
L13 4 ANSWERS MARPAT COPYRIGHT 2009 ACS on STN  
IC ICM A61L017-00  
CC 63-7 (Pharmaceuticals)

TI surface coating of surgical filaments with acylamino acid polyvalent salts  
 to improve smoothness  
 ST surgical filament coating acylamino acid salt; suture surface coating  
 acylamino acid salt  
 IT Medical goods  
     (filaments; surface coating of surgical filaments with acylamino acid  
     polyvalent salts to improve smoothness)  
 IT Amino acids, biological studies  
     RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES  
     (Uses)  
     (acyl, polyvalent salts; surface coating of surgical filaments with  
     acylamino acid polyvalent salts to improve smoothness)  
 IT Medical goods  
     (sutures, surface coating of surgical filaments with acylamino acid  
     polyvalent salts to improve smoothness)  
 IT 1592-23-0, Calcium stearate 138523-38-3 138647-44-6 138705-28-9  
     RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES  
     (Uses)  
     (surface coating of surgical filaments with acylamino acid polyvalent  
     salts to improve smoothness)

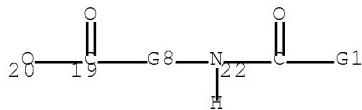
MSTR 1B



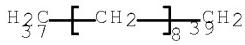
G3 = 28 / 30 / 32



G4 = metal  
 G7 = 20



G8 = 37-19 39-22



Patent location: claim 1

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> S L11 SSS FULL

S L11 SSS FUL FILE=REGISTRY  
FULL SEARCH INITIATED 22:36:40 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 2655 TO ITERATE

100.0% PROCESSED 2655 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L14 0 SEA SSS FUL L11  
1 FILES SEARCHED...

S L14 SSS FUL FILE=MARPAT  
FULL SEARCH INITIATED 22:36:40 FILE 'MARPAT'  
FULL SCREEN SEARCH COMPLETED - 6568 TO ITERATE

100.0% PROCESSED 6568 ITERATIONS 31 ANSWERS  
SEARCH TIME: 00.00.01

L15 31 SEA SSS FUL L11  
1 FILES SEARCHED...

S L14 FILE=CAPLUS  
L16 0 FILE CAPLUS  
1 FILES SEARCHED...

SET DUPORDER FILE  
SET COMMAND COMPLETED

DUP REM L15 L16  
L16 HAS NO ANSWERS  
PROCESSING COMPLETED FOR L15  
PROCESSING COMPLETED FOR L16  
L17 31 DUP REM L15 L16 (0 DUPLICATES REMOVED)  
ANSWERS '1-31' FROM FILE MARPAT

=> D L17 1-31 IBIB ABS FHIT

L17 ANSWER 1 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 150:37495 MARPAT Full-text  
TITLE: Preparation of products containing monomer and  
polymers of titanyls  
INVENTOR(S): Litz, Kyle E.; Dutta, Partha; Lewis, Sarah; Rossetti,  
Mark; Pawlson, James; Ullman, Timothy; Amaratunga,  
Giyana; Vreeland, Jennifer M.; Jordan, Tracey M.  
PATENT ASSIGNEE(S): Applied Nano Works, Inc., USA  
SOURCE: PCT Int. Appl., 65pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008153633	A2	20081218	WO 2008-US5624	20080502
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,				

CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,  
 FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,  
 KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,  
 ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,  
 PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,  
 TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,  
 IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,  
 TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,  
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

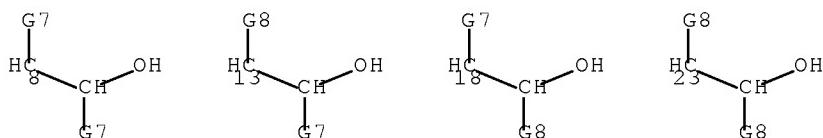
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 US 2007-917171P 20070510  
 US 2008-39619P 20080326

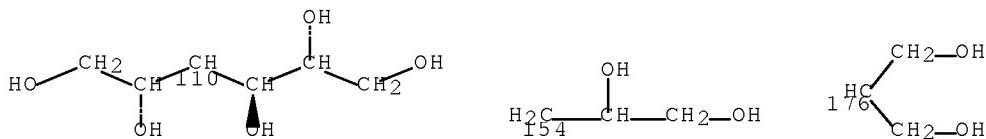
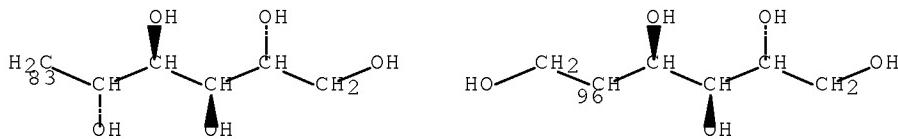
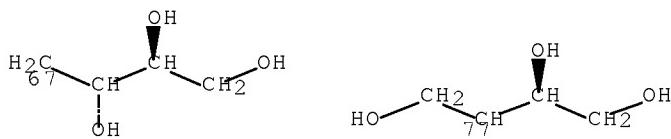
**AB** A compd. having the general formula (I)  $MmOm(OR_2)_n$  is prep'd., wherein M is Ti, Zr, or Hf; R<sub>2</sub> at each occurrence is individually a substituted alkyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, or heterocyclylalkyl group containing at least one OH group, and m and n are integers from 1 to 8. The compound is bis(ethylene glycol)oxotitanium(IV), bis(glycerol)oxotitanium(IV), bis(erythritol)oxotitanium(IV), or bis(sorbitol)oxotitanium(IV). The compds. of formula I are prepared by reacting a compound of formula  $MOX_2$  with X being a halide with a hydroxy group-containing reagent, such as alcs., polyols, sugars, and starches. The compds. have a visible wavelength range transmittance of at least 90% and an UV light transmittance of  $\leq 20\%$  in a wavelength range below about 400 nm. Such compds. form optically transparent and/or clear films or particles or may be used to prepare such materials. Nanoparticles are prepared by hydrolyzing the compound to form a polyoxotitanate-containing hydrosylate. The hydrosylate can be calcined to prepare titania or zirconia. The nanoparticles can be doped into a polymer to adjust the refractive index of the polymer. The polyoxotitanate nanoparticles can be used in coating compns. The compds. of formula I can be used as esterification catalysts, transesterification catalysts, crosslinkers, or for the oxidative desulfurization of fuels.

MSTR 1

G13

G1 = Ti / Zr / Hf  
 G2 = alkyl <containing 1-12 C> (substd. by G3) /  
       cycloalkyl (substd. by G3) / alkyl <containing 1-12 C>  
       (substd. by G4) / heterocycle <containing 1 or more  
       heteroatoms, zero or more N, zero or more O, zero or more S>  
       (substd. by G3) / alkyl <containing 1-12 C> (substd. by G6) /  
       (Specifically claimed: 8 / 13 / 18 / 23 / 67 / 77 / 83 / 96 /  
       110) / (Examples: 154 / 176)





G3 = R / 1 or more OH  
 G4 = 1 or more cycloalkyl (opt. substd. by G5) / R / OH  
 G5 = R / OH  
 G6 = 1 or more heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S> (opt. substd. by G5) / R / OH  
 G7 = H / F / Cl / Br / I / OH / 27 / NH<sub>2</sub> / cycloalkyl (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S> (opt. substd.)

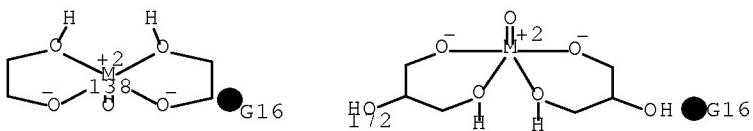
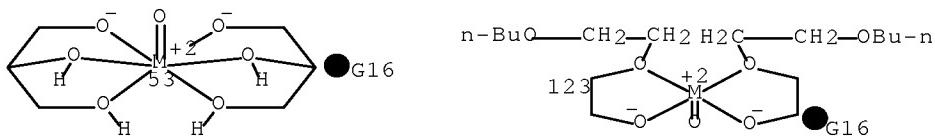
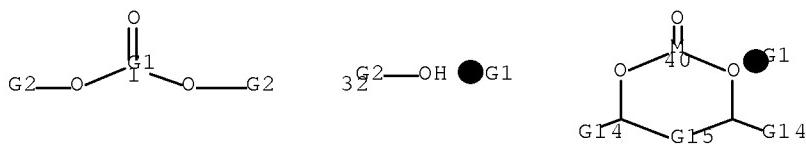
<sub>2</sub>G<sub>10</sub>—G<sub>11</sub>

G8 = CN / alkyl <containing 1-12 C> (opt. substd. by G12)  
 G10 = O / NH / 29

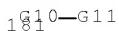
<sub>2</sub>N—G<sub>11</sub>

G11 = alkyl <containing 1-12 C> (opt. substd. by G12) / cycloalkyl (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S> (opt. substd.)  
 G12 = R / cycloalkyl (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S> (opt. substd.)

G13 = 32 / 1 / 40 / (Specifically claimed: 53) /  
 (Examples: 123 / 138 / 172)



G14 = H / F / Cl / Br / I / OH / 181 / NH2 /  
 cycloalkyl (opt. substd.) / heterocycle <containing 1 or  
 more heteroatoms, zero or more N, zero or more O,  
 zero or more S> (opt. substd.) / CN /  
 alkyl <containing 1-12 C> (opt. substd. by G12)



G15 = (1-4) 44



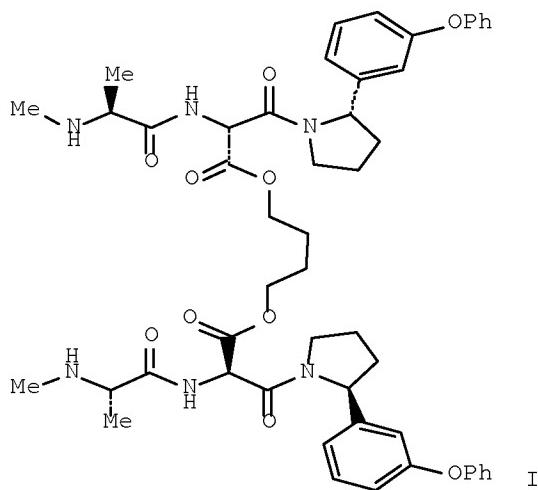
G16 = Ti  
 Patent location: claim 1  
 Note: or complexes with G1

L17 ANSWER 2 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 148:215329 MARPAT Full-text  
 TITLE: Dimeric Smac peptidomimetics as IAP (inhibitor of  
 apoptosis protein) inhibitors, and their therapeutic  
 use  
 INVENTOR(S): Condon, Stephen M.  
 PATENT ASSIGNEE(S): Tetralogic Pharmaceuticals Corporation, USA  
 SOURCE: PCT Int. Appl., 92pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

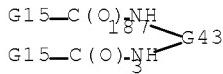
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008014236	A1	20080131	WO 2007-US74181	20070724
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2006-820169P 20060724  
 GI



AB The invention is related to homodimers or heterodimers contg. monomeric units of formula R1R2NCHR3CONHCHR4COUR5 [each R1, R2 = independently H, (un)substituted alk(en/yn)yl, cycloalkyl; each R3 = independently H, CF<sub>3</sub>, alk(en/yn)yl, CH<sub>2</sub>Z; each Z = independently H, OH, F, Cl, CH<sub>2</sub>F, etc.; each R4 = independently straight or branched alkyl, cycloalkyl, alkenyl, aryl, etc.; U = substituted 1,2-cyclopentylene, 1,2-pyrrolidinylene; R5 = independently H, alkyl, aryl, indanyl, etc.; or R5 = a residue of an amino acid], particularly to Smac peptidomimetics, e.g. I, and their pharmaceutically acceptable salts and hydrates, compns. containing them and methods of using them to modulate apoptosis including IAP antagonists. Compns. including mimetics of the invention and, optionally, secondary agents, may be used to treat proliferative disorders such as, cancer and autoimmune diseases.

MSTR 1



G1 = NH / 14



G2 = alkyl <containing 1-4 C> (opt. substd.) /  
alkenyl <containing 2-4 C> (opt. substd.) /  
alkynyl <containing 2-4 C> (opt. substd.) /  
cycloalkyl <containing 3-10 C> (opt. substd.) /  
(Specifically claimed: Me)

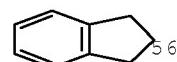
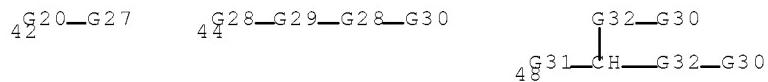
G3 = H / CF<sub>3</sub> / alkyl <containing 1-4 C> /  
alkenyl <containing 2-4 C> / alkynyl <containing 2-4 C> /  
16 / 18 / (Specifically claimed: Me)

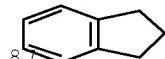
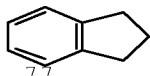
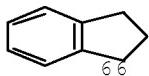


G4 = alkyl <containing 1-16 C> /  
alkenyl <containing 2-16 C> / alkynyl <containing 2-16 C> /  
cycloalkyl <containing 2-10 C> /  
aryl <containing 6-14 C> (opt. substd.) /  
heterocycle <containing 5-12 atoms, 1-4 heteroatoms,  
zero or more N, zero or more O,  
zero or more S (no other heteroatoms)> (opt. substd.) / 20 /  
29



G5 = H / alkyl <containing 1-10 C> /  
aryl <containing 6-14 C> / Ph /  
cycloalkyl <containing 3-7 C> / 42 /  
alkyl <containing 1-10 C> (substd. by 1 or more aryl  
<containing 6-14 C> (opt. substd.)) / 44 / 48 / 56 / 66 /  
77 / 87 / 90 / 92 / 95 / R <"amino acid residue">





<sub>9</sub>G<sub>0</sub>(O)→G23

<sub>9</sub>G<sub>2</sub>8—C(O)→G30

<sub>9</sub>G28—G33

G6 = H / R  
G7 = CH / N  
G8 = H / carbon chain (opt. subst.)  
G9 = 118-153 119-7 / 120-153 122-7

<sub>1</sub>G<sub>3</sub>4—<sub>1</sub>G<sub>3</sub>5      <sub>1</sub>G<sub>3</sub>6—<sub>1</sub>G<sub>3</sub>7—<sub>1</sub>G<sub>3</sub>6

G10 = Me / CF<sub>3</sub> / CH<sub>2</sub>OH / 38

H<sub>2</sub>C<sub>3</sub>8—Cl

G11 = NH / 34

<sub>3</sub>N—G12

G12 = alkyl <containing 1-4 C> (opt. subst.) /  
cycloalkyl <containing 3-7 C> (opt. subst.) /  
Ph (opt. subst.) / 40

<sub>4</sub>G<sub>2</sub>0—G26

G15 = 10 / heterocycle <containing 5-14 atoms,  
1 or more heteroatoms, 1 or more N, zero or more O,  
zero or more S (no other heteroatoms), 1-3 rings>  
(opt. subst. by (1) G2)

G17—CH<sub>1</sub>0  
|  
G3

G16 = 153-200 107-7 / heterocycle <containing 6 or more  
atoms, 1 or more heteroatoms, 1 or more N, zero or more O,  
zero or more S (no other heteroatoms), polycyclic,  
1 or more 5-membered rings> (opt. subst.) /  
carbocycle <containing 6 or more C, polycyclic,  
1 or more 5-membered rings> (opt. subst.)

<sub>1</sub>G<sub>3</sub>8—<sub>1</sub>G<sub>3</sub>9

G17 = NH<sub>2</sub> / 12

<sub>1</sub><sup>G1</sup>—<sub>2</sub><sup>G2</sup>

G18 = (1-2) CH<sub>2</sub>

G19 = H / OH / F / Cl

G20 = (1-6) CH<sub>2</sub>

G21 = aryl <containing 6-14 C> (opt. substd.) / heterocycle <containing 5-12 atoms, 1-4 heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms)> (opt. substd.) / 22

<sub>2</sub><sup>G22</sup>—C(O)—<sub>3</sub><sup>G23</sup>

G22 = NH / 25 / O

<sub>2</sub><sup>N</sup>—<sub>3</sub><sup>G10</sup>

G23 = alkyl <containing 1-10 C> (opt. substd.) / Ph (opt. substd.) / 27

<sub>2</sub><sup>G20</sup>—<sub>3</sub><sup>G24</sup>

G24 = cycloalkyl <containing 3-7 C> (opt. substd.) / Ph (opt. substd.) / heterocycle <containing 5-12 atoms, 1-4 heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms)>  
G25 = NH<sub>2</sub> / 32 / 36 / heterocycle <containing 5-12 atoms, 1-4 heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms), attached through 1 or more N>

<sub>3</sub><sup>G11</sup>—<sub>2</sub><sup>G12</sup>      <sub>3</sub><sup>O</sup>—<sub>2</sub><sup>G23</sup>

G26 = cycloalkyl <containing 3-7 C> (opt. substd.) / Ph (opt. substd.)

G27 = cycloalkyl <containing 3-7 C> (opt. substd.)

G28 = (0-6) CH<sub>2</sub>

G29 = cycloalkylene <containing 3-7 C> (opt. substd.)

G30 = Ph (opt. substd.)

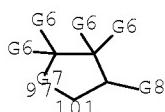
G31 = alkylene <containing 1-4 C> / bond

G32 = alkylene <containing 1-4 C>

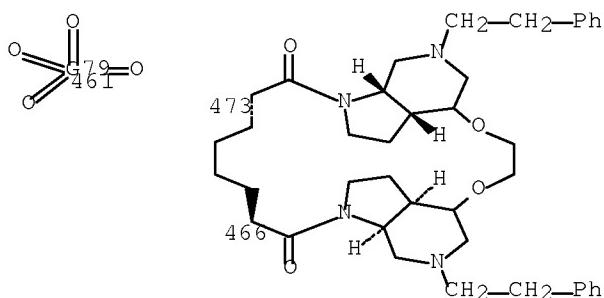
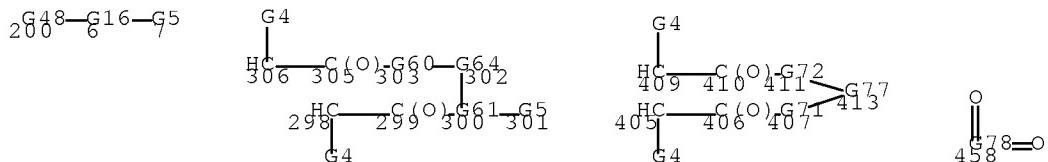
G33 = heterocycle <containing 5-12 atoms, 1-4 heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms)>

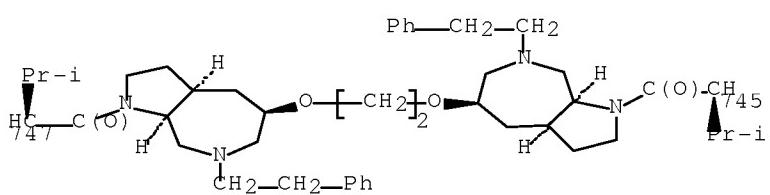
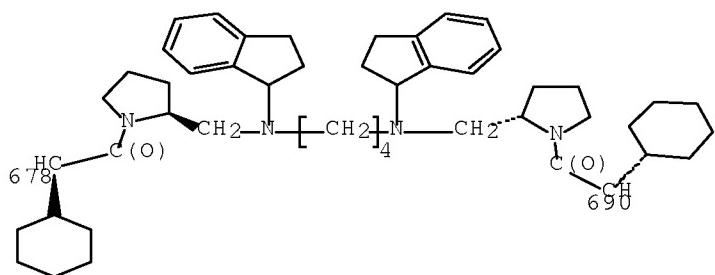
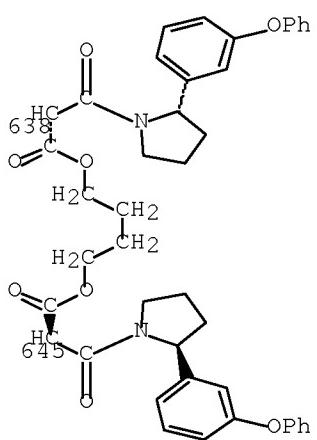
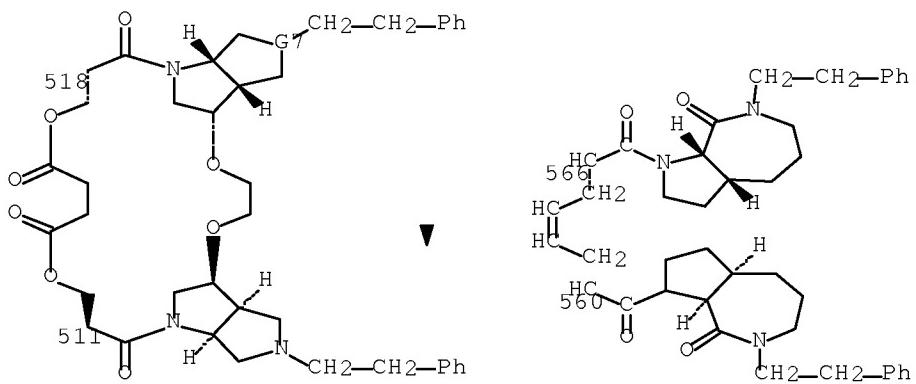
G34 = alkylene (opt. substd.) / (Specifically claimed: C(O))

G35 = NH (opt. substd.) / O / S / S(O) / SO<sub>2</sub>  
 G36 = arylene <containing 6-14 C> (opt. substd.) /  
       heterocycle <containing 5-12 atoms, 1-4 heteroatoms,  
       zero or more N, zero or more O,  
       zero or more S (no other heteroatoms)>  
 G37 = C(O) / CF<sub>2</sub> / O / S / S(O) / SO<sub>2</sub> /  
       arylene <containing 6-14 C> (opt. substd.) /  
       alkylene <containing 1-8 C> (opt. substd.) /  
       heterocycle <containing 5 atoms, 2 heteroatoms, 2 O,  
       saturated, 5-membered monocyclic ring> / NH (opt. substd.)  
 G38 = 97-200 101-107 / heterocycle <containing 6 or more  
       atoms, 1 or more heteroatoms, 1 or more N, zero or more O,  
       zero or more S (no other heteroatoms), polycyclic,  
       1 or more 5-membered rings> (opt. substd.) /  
       carbocycle <containing 6 or more C, polycyclic,  
       1 or more 5-membered rings> (opt. substd.)

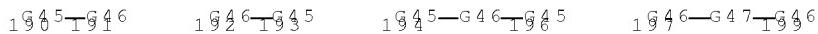


G43 = 200 / 298-3 306-187 / 409-187 405-3 / 458 / 461 /  
 (Specifically claimed: 473-187 466-3 / 518-187 511-3 /  
 566-187 560-3 / 638-187 645-3 / 678-187 690-3 /  
 747-187 745-3 )





G44 = R <"linker"> / carbon chain <containing 1 or more C, 0 or more double bonds, 0 or more triple bonds> (opt. substd.) / carbocycle (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms)> (opt. substd.) / 190-4 191-189 / 192-4 193-189 / 194-4 196-189 / 197-4 199-189 / heteroatom

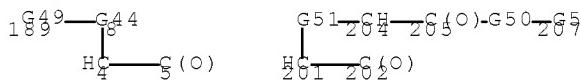


G45 = carbon chain <containing 1 or more C, 0 or more double bonds, 0 or more triple bonds> / carbocycle (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms)> (opt. substd.) / heteroatom

G46 = carbocycle (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms)> (opt. substd.) / heteroatom

G47 = carbon chain <containing 1 or more C, 0 or more double bonds, 0 or more triple bonds> (opt. substd.)

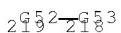
G48 = 4-3 189-187 5-6 / 201-3 202-6 204-187



G49 = 236-8 238-187 / 274-187 272-8



G50 = 219-205 218-207 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)

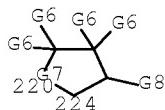


G51 = R <"linker"> / carbon chain <containing 1 or more C, 0 or more double bonds, 0 or more triple bonds>

(opt. substd.) / carbocycle (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms)> (opt. substd.) / 208-201 209-204 / 210-201 211-204 / 212-201 214-204 / 215-201 217-204 / heteroatom

$2\text{G}6^4\text{5}-\overline{2}\text{G}6^4\text{6}$        $2\text{G}6^4\text{6}-\overline{2}\text{I}1\text{5}$        $2\text{I}2\text{4}5-\text{G}4\text{6}-\overline{2}\text{I}4\text{5}$        $2\text{I}5\text{4}6-\text{G}4\text{7}-\overline{2}\text{I}7\text{4}6$

G52 = 220-205 224-218 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)



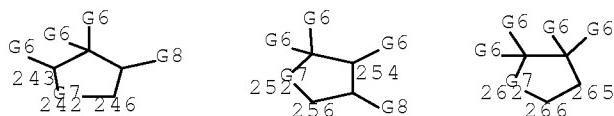
G53 = 230-219 231-207 / 232-219 234-207

$2\text{G}3\text{0}^4-\overline{2}\text{G}3\text{1}^5$        $2\text{G}3\text{2}^6-\text{G}3\text{7}-\overline{2}\text{G}3\text{4}^6$

G54 = 241-237 240-235 241-8 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)

$2\text{G}1\text{5}-\overline{2}\text{G}1\text{9}$

G55 = 242-237 246-240 243-8 / 252-237 256-240 254-8 / 262-237 266-240 265-8 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)

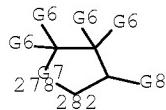


G56 = 277-273 276-8 / heterocycle <containing 6 or more

atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)

$2^{\text{G}57}_{\text{Z}} \text{---} 2^{\text{G}58}_{\text{Z}}$

G57 = 278-273 282-276 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)



G58 = 288-277 289-8 / 290-277 292-8

$2^{\text{G}34}_{\text{Z}} \text{---} 2^{\text{G}35}_{\text{Z}}$        $2^{\text{G}36}_{\text{Z}} \text{---} \text{G}37 \text{---} 2^{\text{G}36}_{\text{Z}}$

G59 = 293-241 294-235 / 295-241 297-235

$2^{\text{G}34}_{\text{Z}} \text{---} 2^{\text{G}35}_{\text{Z}}$        $2^{\text{G}36}_{\text{Z}} \text{---} \text{G}37 \text{---} 2^{\text{G}36}_{\text{Z}}$

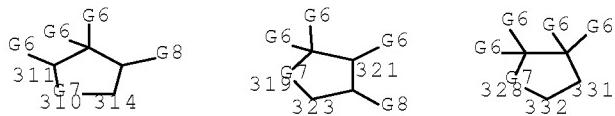
G60 = 352 / 357-305 356-302 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)

$3^{\text{G}25}_{\text{Z}} \text{---} 3^{\text{G}5}_{\text{Z}}$        $3^{\text{G}69}_{\text{Z}} \text{---} 3^{\text{G}70}_{\text{Z}}$

G61 = 309-299 308-301 309-302 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)

$3^{\text{G}62}_{\text{Z}} \text{---} 3^{\text{G}63}_{\text{Z}}$

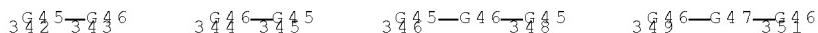
G62 = 310-299 314-308 311-302 /  
 319-299 323-308 321-302 / 328-299 332-308 331-302 /  
 heterocycle <containing 6 or more atoms,  
 1 or more heteroatoms, 1 or more N, zero or more O,  
 zero or more S (no other heteroatoms), polycyclic,  
 1 or more 5-membered rings> (opt. substd.) /  
 carbocycle <containing 6 or more C, polycyclic,  
 1 or more 5-membered rings> (opt. substd.)



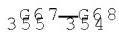
G63 = 337-309 338-301 / 339-309 341-301



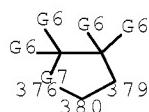
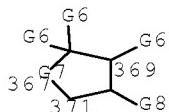
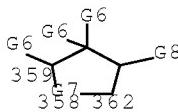
G64 = R <"linker"> / carbon chain <containing 1 or more  
 C, 0 or more double bonds, 0 or more triple bonds>  
 (opt. substd.) / carbocycle (opt. substd.) /  
 heterocycle <containing 1 or more heteroatoms,  
 zero or more N, zero or more O,  
 zero or more S (no other heteroatoms)> (opt. substd.) /  
 342-303 343-300 / 344-303 345-300 / 346-303 348-300 /  
 349-303 351-300 / heteroatom



G65 = 355-305 354-353 355-302 /  
 heterocycle <containing 6 or more atoms,  
 1 or more heteroatoms, 1 or more N, zero or more O,  
 zero or more S (no other heteroatoms), polycyclic,  
 1 or more 5-membered rings> (opt. substd.) /  
 carbocycle <containing 6 or more C, polycyclic,  
 1 or more 5-membered rings> (opt. substd.)



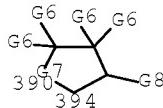
G67 = 358-305 362-354 359-302 /  
 367-305 371-354 369-302 / 376-305 380-354 379-302 /  
 heterocycle <containing 6 or more atoms,  
 1 or more heteroatoms, 1 or more N, zero or more O,  
 zero or more S (no other heteroatoms), polycyclic,  
 1 or more 5-membered rings> (opt. substd.) /  
 carbocycle <containing 6 or more C, polycyclic,  
 1 or more 5-membered rings> (opt. substd.)



G68 = 385-355 386-353 / 387-355 389-353

$385^34-386^35$        $387^36-G37-3836$

G69 = 390-305 394-356 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)



G70 = 400-357 401-302 / 402-357 404-302

$400^34-401^35$        $402^36-G37-404^36$

G71 = 415-406 414-413 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)

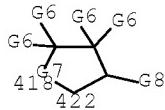
$415^33-414^34$

G72 = 417-410 416-413 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)

$417^35-416^36$

G73 = 418-406 422-414 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) /

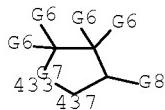
carbocycle <containing 6 or more C, polycyclic,  
1 or more 5-membered rings> (opt. substd.)



G74 = 428-415 429-413 / 430-415 432-413



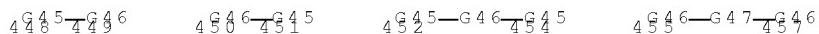
G75 = 433-410 437-416 / heterocycle <containing 6 or  
more atoms, 1 or more heteroatoms, 1 or more N,  
zero or more O, zero or more S (no other heteroatoms),  
polycyclic, 1 or more 5-membered rings> (opt. substd.) /  
carbocycle <containing 6 or more C, polycyclic,  
1 or more 5-membered rings> (opt. substd.)



G76 = 443-417 444-413 / 445-417 447-413



G77 = R <"linker"> / carbon chain <containing 1 or more  
C, 0 or more double bonds, 0 or more triple bonds>  
(opt. substd.) / carbocycle (opt. substd.) /  
heterocycle <containing 1 or more heteroatoms,  
zero or more N, zero or more O,  
zero or more S (no other heteroatoms)> (opt. substd.) /  
448-411 449-407 / 450-411 451-407 / 452-411 454-407 /  
455-411 457-407 / heteroatom



G78 = any ring <containing 18 or more atoms,  
zero or more heteroatoms, zero or more N, zero or more O,  
zero or more S (no other heteroatoms), 3 or more rings,  
2 or more 5-membered rings> (opt. substd. by 2 or more G80)

G79 = any ring <containing 18 or more atoms,  
zero or more heteroatoms, zero or more N, zero or more O,  
zero or more S (no other heteroatoms), 3 or more rings,  
2 or more 5-membered rings> (opt. substd.)

G80 = CONH<sub>2</sub> (opt. substd.) / R

Patent location: claim 2

Note: or pharmaceutically acceptable salts or hydrates  
Note: additional derivatization also claimed

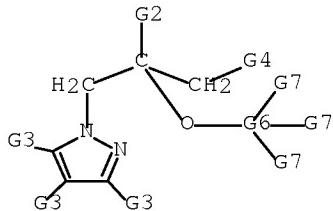
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 149:308294 MARPAT Full-text  
TITLE: Precatalysts useful in polyolefin polymerization reactions  
INVENTOR(S): Ladipo, Omofolami Tesileem; Eaves, Richard; Zazybin, Alexey; Parkin, Sean  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 17pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080207853	A1	20080828	US 2007-710174	20070223
PRIORITY APPLN. INFO.:			US 2007-710174	20070223

AB Pyrazole compds. are provided that are useful as precatalysts in the polymerization of olefins such as ethylene and propylene. Other compds. are useful as intermediates in the production of such precatalysts.

MSTR 8A



G2 = H / alkyl / alkenyl / alkynyl / cycloalkyl / cycloalkenyl / alkoxy / aryl / SiH<sub>3</sub> (opt. subst.) / halo  
G3 = H / alkyl / alkenyl / alkynyl / cycloalkyl / cycloalkenyl / alkoxy / aryl / SiH<sub>3</sub> (opt. subst.) / halo  
G4 = NH<sub>2</sub> / 21 / 24

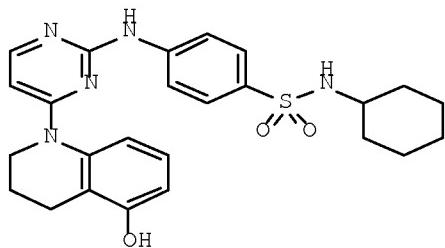
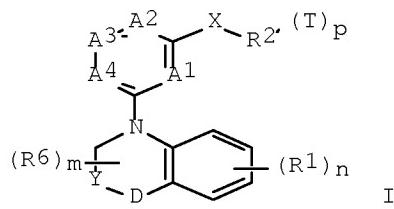


G5 = alkyl / alkenyl / alkynyl / cycloalkyl / cycloalkenyl / alkoxy / aryl / SiH<sub>3</sub> (opt. subst.) / halo  
G6 = Ti / Zr / Hf  
G7 = R <"monodentate ligand">  
Patent location: claim 6

L17 ANSWER 4 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 147:406835 MARPAT Full-text  
 TITLE: Heterocyclic organic compounds as tyrosine and serine-threonine kinase protein inhibitors for the treatment of in particular melanoma and their preparation  
 INVENTOR(S): Batt, David Bryant; Beerli, Rene; Bold, Guido; Caravatti, Giorgio; Ramsey, Timothy Michael  
 PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH  
 SOURCE: PCT Int. Appl., 55pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

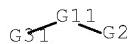
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007109045	A1	20070927	WO 2007-US6424	20070314
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2007227602	A1	20070927	AU 2007-227602	20070314
CA 2644356	A1	20070927	CA 2007-2644356	20070314
EP 2001864	A1	20081217	EP 2007-753076	20070314
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR			
JP 2009530288	T	20090827	JP 2009-500458	20070314
IN 2008DN07259	A	20081003	IN 2008-DN7259	20080826
MX 2008011661	A	20080922	MX 2008-11661	20080911
KR 2009052301	A	20090525	KR 2008-722399	20080912
US 20090069360	A1	20090312	US 2008-293257	20080916
PRIORITY APPLN. INFO.:			US 2006-783175P	20060316
			WO 2007-US6424	20070314

OTHER SOURCE(S): CASREACT 147:406835  
 GI



AB The invention relates to the discovery that certain compds. of formula I inhibit, regulate and/or modulate tyrosine and serine/threonine kinase and kinase-like proteins, such as RAF kinase, a serine/threonine kinase that functions in the MAP kinase signaling pathway, and is concerned with compns. which contain these compds., and methods of using them to treat tyrosine and serine/threonine kinase and kinase-like dependent diseases, such as angiogenesis, cancer and cardiac hypertrophy. Compds. of formula I wherein A1, A2, A3 and A4 are independently N, CH and substituted C, where at least one of A1-A4 is N; X is NH and derivs., O, and S; R1 is substituted aryl; n is 0 - 4; Y and D are independently O, S, CH<sub>2</sub>, NH and derivs. and substituted methylene; R6 is a substituted ring which contains Y and D; m is 0 to the maximum number of valencies of the ring; R2 is (un)substituted hydrocarbyl and (un)substituted heterocyclic; T is H, halo, alkoxy, SH and derivs., SO<sub>2</sub>H and derivs., etc.; and their pharmaceutically acceptable salts, esters and prodrugs thereof, are claimed. Example compound II was prepared by a general procedure (procedure given). All the invention compds. were evaluated for their tyrosine and serine-threonine kinase and kinase-like protein inhibitory activity.

MSTR 1

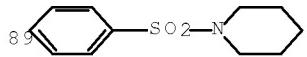


G1 = H / aryl (opt. substd.) / heteroaryl (opt. substd.) / 25 / R / (Specifically claimed: OH / 72 / SH / F / Cl / Br / I / NH<sub>2</sub> (opt. substd.) / CF<sub>3</sub> / alkyl <containing 1-4 C> (opt. substd.) / R <"heteroalkyl"> / 79 / 81)

2G12—G13      7G21—G22      7G18—G23      8G24—G18—G23

G2 = carbon chain (opt. substd. by (1-5) G7) /

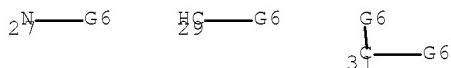
carbocycle (opt. substd. by (1-5) G7) /  
 heterocycle <containing up to 16 atoms, zero or more N,  
 zero or more O, zero or more S> (opt. substd. by (1-5) G7) /  
 (Specifically claimed: 89 / Ph (opt. substd. by (1-5) G7) /  
 imidazolyl (opt. substd.) / pyrrolyl (opt. substd.) /  
 oxazolyl (opt. substd.) / isoxazolyl (opt. substd.))



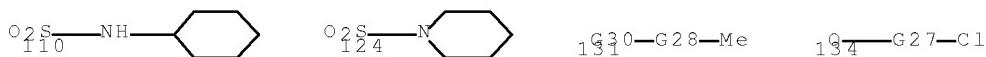
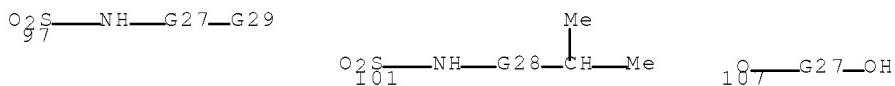
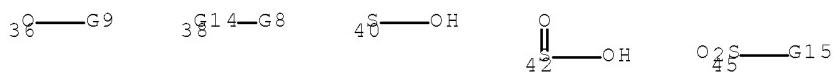
G3 = H / carbon chain (opt. substd.) /  
 carbocycle (opt. substd.) / R  
 G4 = N / 19



G5 = O / S / CH2 / 29 / 31 / 27



G6 = H / R  
 G7 = carbon chain (opt. substd.) /  
 carbocycle (opt. substd.) / heterocycle <containing up to 16  
 atoms, zero or more N, zero or more O, zero or more S>  
 (opt. substd.) / F / Cl / Br / I / 36 / SH / 38 /  
 40 / 42 /  
 45 / (Specifically claimed: 97 / 101 / 107 / 110 / 124 /  
 131 / 134)



G8 = alkyl (opt. substd. by 1 or more G26) /  
 R <"heteroalkyl"> / 51 / 53 / cycloalkyl (opt.  
 substd.) /

heterocycle <containing up to 16 atoms, zero or more N, zero or more O, zero or more S> (opt. substd.) / aryl (opt. substd.) / heteroaryl (opt. substd.) / 56 / (Specifically claimed: alkoxy (opt. substd.) / alkylamino (opt. substd.))

5<sub>1</sub>G18—G19      5<sub>3</sub>G20—G18—G19      5<sub>6</sub>G12—G13

G9      = alkyl (opt. substd. by 1 or more G25) / R <"heteroalkyl"> / 58 / 60 / cycloalkyl (opt. substd.) / aryl (opt. substd.) / heteroaryl (opt. substd.) / 63

5<sub>8</sub>G18—G19      6<sub>0</sub>G20—G18—G19      6<sub>3</sub>G12—G13

G11      = NH (opt. substd.) / O / S  
G12      = R / (Examples: O / CH2)  
G13      = aryl (opt. substd.) / heteroaryl (opt. substd.)  
G14      = S / S(O) / SO2  
G15      = NH2 / 47 / F / Cl / Br / I / heterocycle <containing 1 or more N, attached through 1 or more N> (opt. substd.) / alkyl (opt. substd.) / R <"heteroalkyl"> / 137 / 139 / cycloalkyl (opt. substd.) / heterocycle <containing up to 16 atoms, zero or more N, zero or more O, zero or more S> (opt. substd.) / aryl (opt. substd.) / heteroaryl (opt. substd.) / 142 / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S> (opt. substd.)

4<sub>7</sub>G16—G17      1<sub>3</sub>§7—G19      1<sub>3</sub>§9G18—G19      1<sub>4</sub>‡2—G13

G16      = NH / 49

4§8—G17

G17      = alkyl (opt. substd.) / R <"heteroalkyl"> / 65 / 67 / cycloalkyl (opt. substd.) / heterocycle <containing up to 16 atoms, zero or more N, zero or more O, zero or more S> (opt. substd.) / aryl (opt. substd.) / heteroaryl (opt. substd.) / 70 / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S> (opt. substd.)

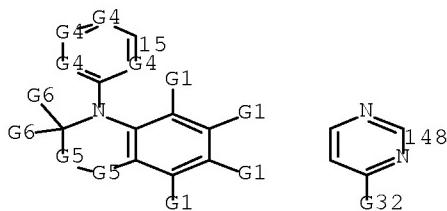
6<sub>5</sub>G18—G19      6<sub>7</sub>G20—G18—G19      7<sub>0</sub>G12—G13

G18      = heteroatom / R <"heteroatom"> / (Example: O)

G19 = alkyl (opt. substd.)  
 G20 = alkylene (opt. substd.)  
 G21 = O / S  
 G22 = alkyl (opt. substd.) / R <"heteroalkyl"> / 74 / 76

7G18—G19      7G20—G18—G19

G23 = alkyl <containing 1-4 C> (opt. substd.)  
 G24 = alkylene <containing 1-4 C> (opt. substd.)  
 G25 = R / (Specifically claimed: F / Cl / Br / I)  
 G26 = R / (Specifically claimed: F / Cl / Br / I / CO2H)  
 G27 = (1-4) CH2  
 G28 = (0-4) CH2  
 G29 = CO2H / OH / NMe2  
 G30 = SO2 / S  
 G31 = 15 / 148



G32 = OH / Cl

Patent location:

claim 1

Note: or pharmaceutically acceptable salts, esters, or prodrugs

Note: substitution is restricted

Note: additional heteroatom interruptions also claimed

Note: also incorporates claim 78

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:47309 MARPAT [Full-text](#)

TITLE: 1,2,4-Triazolidine-3-thione derivatives as medical and agrochemical fungicides

INVENTOR(S): Eschrich, Dietmar; Recktenwald, Juergen; Entian, Karl-Dieter

PATENT ASSIGNEE(S): Phenion G.m.b.H. & Co. K.-G., Germany

SOURCE: PCT Int. Appl., 66pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

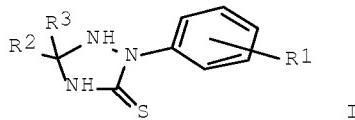
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007068422	A1	20070621	WO 2006-EP11897	20061211
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				

GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,  
 KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,  
 MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,  
 RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,  
 TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM  
 DE 102005059279 A1 20070628 DE 2005-10200505927920051212  
 EP 1959736 A1 20080827 EP 2006-829487 20061211  
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR  
 PRIORITY APPLN. INFO.: DE 2005-10200505927920051212  
 WO 2006-EP11897 20061211

GI

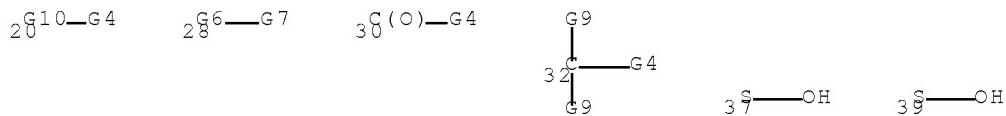


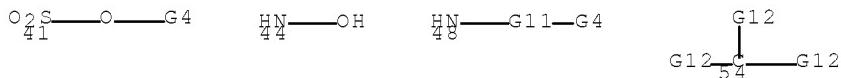
**AB** 1,2,4-Triazolidine-3-thione derivs. I [R1 =H, OH, CO<sub>2</sub>H, SH, NH<sub>2</sub>, NO, NO<sub>2</sub>, (un)substituted alkyl, alkenyl, alkynyl, hetroalkyl, etc.; R2, R3 = H, OH, alkoxy, CO<sub>2</sub>H, (un)substituted alkyl, aryl, etc.; R<sub>2</sub>R<sub>3</sub> = ring] are agrochem. and medical fungicides. The preparation of I is outlined.

MSTR 2

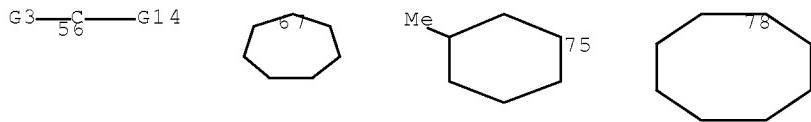
G2=G13

**G1** = H / OH / 20 / carbon chain <containing 1-20 C,  
 0 or more double bonds, 0 or more triple bonds>  
 (opt. subst. by G5) / any ring <containing 3-20 atoms,  
 zero or more N, zero or more O, zero or more S>  
 (opt. subst. by G8) / R / 28 / CHO / 30 / CH<sub>3</sub> / 32 / SH /  
 37 / 39 / SO<sub>3</sub>H / 41 / NH<sub>2</sub> / 44 / NHNNH<sub>2</sub> / NO<sub>2</sub> / 48 / F / Cl /  
 Br / I / 54 / (Specifically claimed: Me)

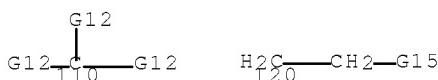
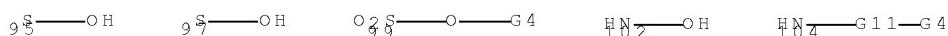
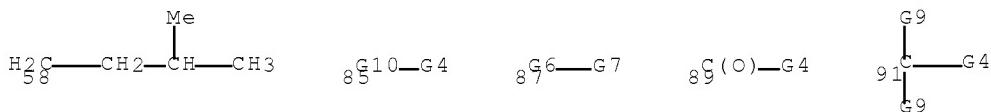




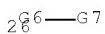
**G2** = any ring <attached through 1 C> / 56 /  
 (Specifically claimed: 67 / 75 / 78)



**G3** = H / OH / 85 / carbon chain <containing 1-20 C,  
 0 or more double bonds, 0 or more triple bonds>  
 (opt. substd. by G5) / any ring <containing 3-20 atoms,  
 zero or more N, zero or more O, zero or more S>  
 (opt. substd. by G8) / 87 / CHO / 89 / CH3 / 91 / SH / 95 /  
 97 / SO3H / 99 / NH2 / 102 / NHH2 / NO2 / 104 / F / Cl /  
 Br / I / 110 / R <"protected group"> /  
 (Specifically claimed: Me / 58 / 120 / Bu-n / pentyl / Pr-n /  
 Ph / 2-thienyl)



**G4** = carbon chain <containing 1-20 C,  
 0 or more double bonds, 0 or more triple bonds>  
 (opt. substd. by G5) / any ring <containing 3-20 atoms,  
 zero or more N, zero or more O, zero or more S>  
 (opt. substd. by G8) / R / 26



**G5** = heteroatom / OH / SH / NH2 / R / 24 /  
 any ring <containing 3-20 atoms, zero or more N,  
 zero or more O, zero or more S>

$_{22}^{G6} \text{---} G7$

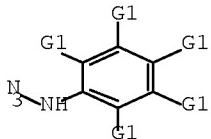
G6 = heteroatom / O / S / NH  
G7 = carbon chain <containing 1-20 C,  
      0 or more double bonds, 0 or more triple bonds> /  
      any ring <containing 3-20 atoms, zero or more N,  
      zero or more O, zero or more S>  
G8 = carbon chain <containing 1-20 C,  
      0 or more double bonds, 0 or more triple bonds> /  
      any ring <containing 3-20 atoms, zero or more N,  
      zero or more O, zero or more S> / heteroatom / OH / SH /  
      NH2 / R / 22

$_{22}^{G6} \text{---} G7$

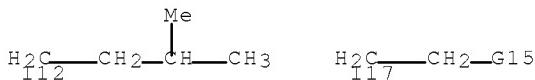
G9 = H / R  
G10 = O / S / S(O) / SO2 / NH / 46

$_{46}^N \text{---} G4$

G11 = NH / O  
G12 = H / F / Cl / Br / I  
G13 = O / S



G14 = H / R <"protected group"> /  
(Specifically claimed: Me / 112 / 117 / Bu-n / pentyl /  
Pr-n / Ph / 2-thienyl)



G15 = H / Ph  
Patent location: claim 1  
Note: incorporates formulae II, IV, IIa, and IVa  
Note: substitution is restricted  
Note: additional substitution also claimed

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

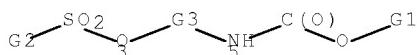
L17 ANSWER 6 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 146:100433 MARPAT Full-text

TITLE: Process for the production of  
 (alkoxycarbonylamino)alkyl sulfonates  
 INVENTOR(S): Cladingboel, David; Herring, Adam; Sinclair, Rhona  
 PATENT ASSIGNEE(S): Astrazeneca AB, Swed.  
 SOURCE: PCT Int. Appl., 25pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006137774	A1	20061228	WO 2006-SE694	20060612
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2006259941	A1	20061228	AU 2006-259941	20060612
CA 2610205	A1	20061228	CA 2006-2610205	20060612
EP 1896402	A1	20080312	EP 2006-747887	20060612
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR				
JP 2008546765	T	20081225	JP 2008-518073	20060612
NO 2007006088	A	20080118	NO 2007-6088	20071127
MX 2007016093	A	20080310	MX 2007-16093	20071214
IN 2007DN09686	A	20080620	IN 2007-DN9686	20071214
CN 101268040	A	20080917	CN 2006-80021951	20071219
KR 2008016933	A	20080222	KR 2008-700124	20080103
PRIORITY APPLN. INFO.:			SE 2005-1429	20050620
			SE 2005-2770	20051215
			WO 2006-SE694	20060612

OTHER SOURCE(S): CASREACT 146:100433  
 AB A process for the prodn. of (alkoxycarbonylamino)alkyl sulfonates [e.g., 2-(tert-butyloxycarbonylamino)ethyl 2,4,6-trimethylbenzenesulfonate] is presented.

MSTR 1



G1 = carbon chain <containing 1-6 C>  
 (opt. substd. by 1 or more G7) /  
 carbocycle <containing 3-6 C> (opt. substd. by 1 or more G7)  
 / 14 / 16 / heterocycle <containing 3-6 atoms,  
 1 or more heteroatoms, zero or more O, zero or more S>  
 (opt. substd. by 1 or more G7) / aryl (opt. substd.) /

carbocycle (opt. subst.) / heterocycle <containing 4-14 atoms, 1 or more heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms), mono- or polycyclic> (opt. subst. by 1 or more G9) / R / (Specifically claimed: Bu-t)

1<sub>1</sub>G<sub>4</sub>—G<sub>8</sub>      1<sub>6</sub>G<sub>8</sub>—G<sub>4</sub>—G<sub>8</sub>

G2 = carbon chain <containing 1-4 C>  
(opt. subst. by 1 or more G15) /  
carbocycle <containing 3-4 C> (opt. subst. by 1 or more G15)  
/ heterocycle <containing 3-4 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S>  
(opt. subst. by 1 or more G15) / 31 / 33 /  
carbon chain <containing 1-4 C, no H>  
(subst. by 3 or more F) / carbocycle <containing 3-4 C,  
no H> (subst. by 5 or more F) /  
heterocycle <containing 3-4 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S, no H>  
(subst. by 3 or more F) / Ph (opt. subst. by 1 or more G16)

3<sub>1</sub>G<sub>4</sub>—G<sub>14</sub>      3<sub>3</sub>G<sub>14</sub>—G<sub>4</sub>—G<sub>14</sub>

G3 = carbon chain <containing 2-6 C>  
(opt. subst. by 1 or more G6) /  
carbocycle <containing 3-6 C> (opt. subst. by 1 or more G6)  
/ 10-3 9-5 / 11-3 13-5 / heterocycle <containing  
3-6 atoms, 1 or more heteroatoms, zero or more O, zero or more S>  
(opt. subst. by 1 or more G6) / R /  
(Specifically claimed: CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub> / CH<sub>2</sub>CH<sub>2</sub>)

1<sub>6</sub>G<sub>5</sub>—G<sub>4</sub>      1<sub>1</sub>G<sub>5</sub>—G<sub>4</sub>—T<sub>3</sub>G<sub>5</sub>

G4 = O / S / heteroatom  
G5 = carbon chain <containing 2-6 C> (opt. subst.) /  
carbocycle <containing 3-6 C> (opt. subst.) /  
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S> (opt. subst.)  
G6 = carbon chain <containing 2-6 C> (opt. subst.) /  
carbocycle <containing 3-6 C> (opt. subst.) /  
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S> (opt. subst.) / R  
G7 = carbon chain <containing 1-6 C> (opt. subst.) /  
carbocycle <containing 3-6 C> (opt. subst.) /  
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S> (opt. subst.) / OH / F /  
Cl / Br / I / CN / NO<sub>2</sub> / aryl (opt. subst.) /  
carbocycle (opt. subst.) / R  
G8 = carbon chain <containing 1-6 C> (opt. subst.) /  
carbocycle <containing 3-6 C> (opt. subst.) /  
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S> (opt. subst.)

G9 = F / Cl / Br / I / NO<sub>2</sub> /  
carbon chain <containing 1-6 C>  
(opt. subst. by 1 or more G12) /  
carbocycle <containing 3-6 C> (opt. subst. by 1 or more G12)  
/ 19 / 21 / heterocycle <containing 3-6 atoms,  
1 or more heteroatoms, zero or more O, zero or more S>  
(opt. subst. by 1 or more G12) / 24 / R

1<sub>9</sub><sup>G</sup>4—G8      2<sub>1</sub><sup>G</sup>8—G4—G8      2<sub>4</sub><sup>Q</sup>—G10

G10 = carbon chain <containing 1-6 C>  
(opt. subst. by 1 or more G12) /  
carbocycle <containing 3-6 C> (opt. subst. by 1 or more G12)  
/ 26 / 28 / heterocycle <containing 3-6 atoms,  
1 or more heteroatoms, zero or more O, zero or more S>  
(opt. subst. by 1 or more G12)

2<sub>6</sub><sup>G</sup>11—G13      2<sub>8</sub><sup>G</sup>13—G4—G13

G11 = S / heteroatom  
G12 = carbon chain <containing 1-6 C> (opt. subst.) /  
carbocycle <containing 3-6 C> (opt. subst.) /  
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S> (opt. subst.) / F / Cl /  
Br / I / R  
G13 = carbon chain <containing 1-6 C>  
(opt. subst. by 1 or more G12) /  
carbocycle <containing 3-6 C> (opt. subst. by 1 or more G12)  
/ heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S>  
(opt. subst. by 1 or more G12)  
G14 = carbon chain <containing 1-4 C> (opt. subst.) /  
carbocycle <containing 3-4 C> (opt. subst.) /  
heterocycle <containing 3-4 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S> (opt. subst.)  
G15 = carbon chain <containing 1-4 C> (opt. subst.) /  
carbocycle <containing 3-4 C> (opt. subst.) /  
heterocycle <containing 3-4 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S> (opt. subst.) / F  
G16 = carbon chain <containing 1-6 C>  
(opt. subst. by 1 or more G17) /  
carbocycle <containing 3-6 C> (opt. subst. by 1 or more G17)  
/ heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S>  
(opt. subst. by 1 or more G17) / 36 / 38 / F / Cl / Br / I /  
NO<sub>2</sub> / 41 / (Specifically claimed: Me)

3<sub>6</sub><sup>G</sup>4—G8      3<sub>8</sub><sup>G</sup>8—G4—G8      4<sub>1</sub><sup>Q</sup>—G18

G17 = carbon chain <containing 1-6 C> (opt. subst.) /  
carbocycle <containing 3-6 C> (opt. subst.) /  
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S> (opt. subst.) / R  
G18 = carbon chain <containing 1-6 C>

(opt. subst. by 1 or more G17) /  
 carbocycle <containing 3-6 C> (opt. subst. by 1 or more G17)  
 / heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
 zero or more O, zero or more S>  
 (opt. subst. by 1 or more G17) / 43 / 45

4G11—G8      4G8—G4—G8

Patent location: claim 1  
 Note: substitution is restricted

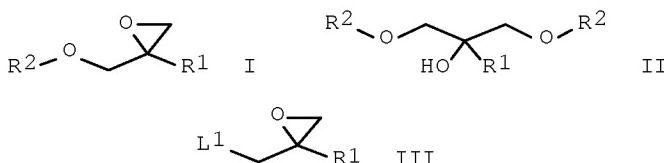
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 146:100539 MARPAT Full-text  
 TITLE: Process for the isolation of  
 4-(oxiranylmethoxy)-benzonitriles  
 INVENTOR(S): Erbeck, Silke; Kiriacescu, Oscar-Paul; Kronstroem,  
 Anders  
 PATENT ASSIGNEE(S): Astrazeneca AB, Swed.  
 SOURCE: PCT Int. Appl., 30pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

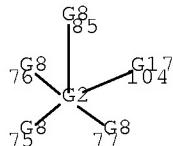
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006137773	A1	20061228	WO 2006-SE693	20060612
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: SE 2005-1430 20050620  
 GI

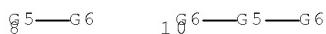


AB There is provided a process for the isolation of a compd. of formula I (R1 = H or alkyl; R2 = (un)substituted Ph or pyridyl), or a solvate thereof, from a mixture comprising a compound of formula I and a compound of formula II (R1 and R2 are defined as above), wherein the mixture of compds. of formulas I and II may be prepared by reaction of a compound of formula R2-OH with a compound of formula III (L1 is a leaving group). For example, reaction of 4-cyanophenol with (R)-(-)-epichlorohydrin gave 4-((2S)-oxiranylmethoxy)benzonitrile in 63% yield after purification

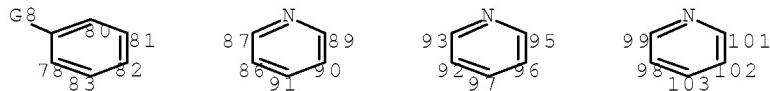
MSTR 1



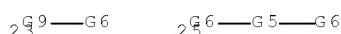
G1 = H / carbon chain <containing 1-6 C> (opt. substd.) / carbocycle <containing 3-6 C> (opt. substd.) / heterocycle <containing 3-6 atoms, 1 or more heteroatoms, zero or more O, zero or more S> (opt. substd.) / 8 / 10



G2 = 80-104 81-77 82-75 83-76 78-85 /  
89-104 90-77 91-75 86-76 87-85 /  
96-104 95-77 97-75 92-76 93-85 /  
103-104 101-77 102-75 98-76 99-85



G3 = carbon chain <containing 1-6 C> (opt. substd.) / carbocycle <containing 3-6 C> (opt. substd.) / heterocycle <containing 3-6 atoms, 1 or more heteroatoms, zero or more O, zero or more S> (opt. substd.) / 23 / 25

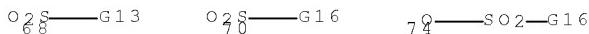
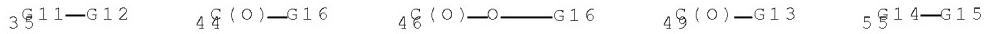
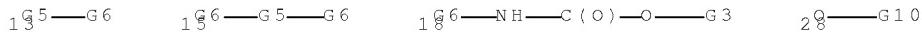


G5 = O / S / heteroatom

G6 = carbon chain <containing 1-6 C> (opt. substd.) / carbocycle <containing 3-6 C> (opt. substd.) / heterocycle <containing 3-6 atoms, 1 or more heteroatoms, zero or more O, zero or more S> (opt. substd.)

G8 = H / OH / CN / F / Cl / Br / I / NO<sub>2</sub> / carbon chain <containing 1-6 C> (opt. substd.) / carbocycle <containing 3-6 C> (opt. substd.) / heterocycle <containing 3-6 atoms, 1 or more heteroatoms,

zero or more O, zero or more S> (opt. substd.) / 13 / 15 /  
18 / 28 / NH2 / 35 / heterocycle <containing 4-7 atoms,  
1 or more heteroatoms, 1 or more N,  
attached through 1 or more N, non-aromatic, saturated>  
(opt. substd.) / CHO / 44 / CO2H / 46 / 49 / 55 / 68 / 70 /  
74 / aryl (opt. substd.) / carbocycle (opt. substd.)



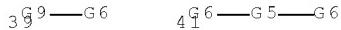
G9 = S / heteroatom  
G10 = carbon chain <containing 1-6 C> (opt. substd.) /  
carbocycle <containing 3-6 C> (opt. substd.) /  
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S> (opt. substd.) / 30 / 32



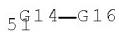
G11 = NH / 37



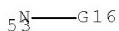
G12 = carbon chain <containing 1-6 C> (opt. substd.) /  
carbocycle <containing 3-6 C> (opt. substd.) /  
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,  
zero or more O, zero or more S> (opt. substd.) / 39 / 41



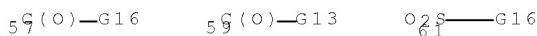
G13 = NH2 / 51



G14 = NH / 53



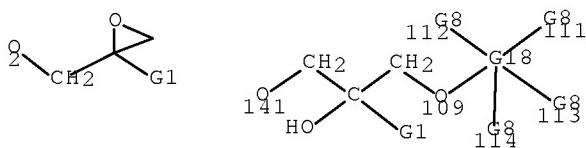
G15 = CHO / 57 / 59 / 61



G16 = carbon chain <containing 1-6 C> (opt. substd.) / carbocycle <containing 3-6 C> (opt. substd.) / heterocycle <containing 3-6 atoms, 1 or more heteroatoms, zero or more O, zero or more S> (opt. substd.) / 63 / 65



G17 = 2 / 141 / OH



G18 = 117-109 118-112 119-111 120-113 115-114 /  
125-109 126-112 127-111 122-113 123-114 /  
132-109 131-112 133-111 128-113 129-114 /  
139-109 137-112 138-111 134-113 135-114



Patent location:

claim 1

Note:

or solvates

Note:

also incorporates formula II

Note:

also incorporates claim 9, formula III

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:71602 MARPAT Full-text

TITLE: Optical device structure

INVENTOR(S): Kaerkkaainen, Ari

PATENT ASSIGNEE(S): Braggone Oy, Finland

SOURCE: PCT Int. Appl., 53pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006134218	A1	20061221	WO 2006-FI209	20060615
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,  
KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW,  
MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,  
SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW

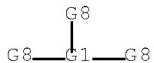
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IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM

US 20080284320 A1 20081120 US 2008-917506 20080104

PRIORITY APPLN. INFO.: US 2005-691315P 20050615  
WO 2006-FI209 20060615

AB A method of fabricating a photonic crystal device is described entailing providing a substrate; depositing on the substrate a first optical material having a first index of refraction to form a first layer; and depositing on the first layer a second layer of a second optical material having a second index of refraction, which is lower than that of the first optical material; where at least one of the optical materials is a material selected from the group of liquid phase processible metal oxides, liquid phase processible metalloid oxides and mixts. thereof; and the index of refraction of the first optical material is 1.9 or higher at a wavelength of 632.8 nm. A photonic crystal is also described. An organic light emitting diode is also described comprising, in overlapping arrangement, a substrate; a high refractive index layer; a low refractive index layer; a patterned low refractive index layer; and an organic light emitting diode structure, where the refractive index layers may form photonic crystal device.

MSTR 1A



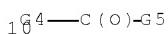
G1 = 15 / R <"metal"> / (Specifically claimed: Sb)



G2 = alkyl (opt. substd. by (1-3) G3) /  
cycloalkyl (opt. substd. by (1-3) G3) / 13



G3 = OH / CO2H / R <"anhydride"> / NO2 / 10



G4 = NH (opt. substd.)  
G5 = H / R

G6 = carbon chain (opt. substd.) /  
       carbocycle <non-aromatic> (opt. substd.)  
 G7 = R <"metal"> / (Specifically claimed: Ge / Ti / Sn /  
       Ta / Hf / Zr / Si)  
 G8 = halo / 2

2—G2

Patent location: claim 4

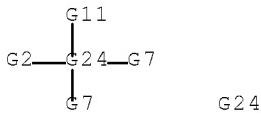
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 9 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 145:420288 MARPAT Full-text  
 TITLE: Polyethylene resins for food packaging - films, bags and pouches and preparation thereof  
 INVENTOR(S): Goyal, Shivendra Kumar; Boparai, Ishkmandeep Kaur  
 PATENT ASSIGNEE(S): Nova Chemicals (International) S.A., Switz.  
 SOURCE: PCT Int. Appl., 44pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

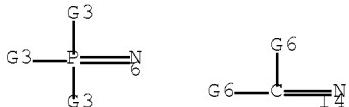
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006108265	A1	20061019	WO 2006-CA360	20060315
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RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
US 20060235147	A1	20061019	US 2005-106265	20050414
CA 2539762	A1	20061014	CA 2006-2539762	20060315

PRIORITY APPLN. INFO.: AB Packaging films, bags and pouches for foods, such as meat, vegetables, dairy products, dry goods, bakery goods, ice, microwavable foods, syrup, water, beverage, juice, and baby bottle liners, are made from LLDPE having a d. of 0.914 - 0.945, which is prepared from ethylene and C3-12  $\alpha$ -olefins in solvent in a first reactor at 80-200° in the presence of organometallic complexes catalyst having phosphinimine ligand and co-catalyst selected from aluminoxane and ionic activator, and in a second reactor further polymerizing with ethylene and  $\alpha$ -olefins at 10,500 - 35,000 KPa and 20° higher than the first reactor. Thus, ethylene and octene were polymerized in the presence of CpTiNP(t-Bu)3C12 as catalyst, and methylalumoxane (MMAO-7) and tripehnylcarbenium tetrapentafluorophenylborate as cocatalyst to prepare the LLDPE for food packaging materials.

MSTR 4



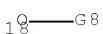
G2 = 6 / 14



G3 = H / halo / carbon chain <containing 1-20 C>  
(opt. substd. by 1 or more G21) /  
carbocycle <containing 3-20 C> (opt. substd. by 1 or more  
G21) / alkoxy <containing 1-8 C> /  
aryl <containing 6-10 C> (opt. substd. by (1-3) G13) /  
aryloxy <containing 6-10 C> (opt. substd. by (1-3) G13) /  
NH2 (opt. substd.) / 9 / 44 / (Specifically claimed: alkyl  
<containing 1-10 C>)



G4 = H / alkyl <containing 1-8 C> /  
alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
aryloxy <containing 6-10 C> / (Specifically claimed: Ph)  
G6 = R <"substituent"> / (Specifically claimed: carbon  
chain <containing 3 or more C> (opt. substd.) /  
carbocycle <containing 3 or more C> (opt. substd.))  
G7 = R <"activatable ligand"> /  
(Specifically claimed: H / Cl / F /  
carbon chain <containing 1-10 C>  
(opt. substd. by 1 or more G23) /  
carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)  
/ 18)

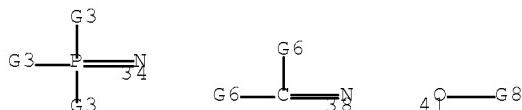


G8 = alkyl <containing 1 or more C>  
(opt. substd. by 1 or more G23) /  
aryl <containing 6-10 C> (opt. substd. by 1 or more G9)  
G9 = halo / alkyl <containing 1-8 C> /  
alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
aryloxy <containing 6-10 C> / NH2 /  
alkylamino <containing 1-8 C> /

dialkylamino <each alkyl containing 1-8 C> / 20

G10—<sub>2</sub><sup>B</sup>—G10

G10 = alkyl <containing 1-8 C> / H  
G11 = 34 / 38 / R <"activatable ligand"> /  
      (Specifically claimed: H / Cl / F /  
      carbon chain <containing 1 or more C>  
      (opt. subst. by 1 or more G23) /  
      carbocycle <containing 3-10 C> (opt. subst. by 1 or more G9)  
      / 41)



G12 = H / alkyl <containing 1-8 C> /  
      alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
      aryloxy <containing 6-10 C>  
G13 = R / (Specifically claimed: alkyl <containing 1-4 C>)  
G21 = R / halo  
G23 = halo / alkoxy <containing 1-8 C> /  
      aryl <containing 6-10 C> / aryloxy <containing 6-10 C> /  
      NH<sub>2</sub> / alkylamino <containing 1-8 C> /  
      dialkylamino <each alkyl containing 1-8 C> / 73

G10—<sub>2</sub><sup>B</sup>—G10

G24 = R <"transition metal"> / (Specifically claimed: Ti /  
      Zr / Hf)

Patent location: claim 2

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 10 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 145:249682 MARPAT Full-text  
TITLE: Broad/bimodal polyolefin resins with controlled  
      comonomer distribution  
INVENTOR(S): Hoang, Peter Phung Minh; Baxter, Gail  
PATENT ASSIGNEE(S): Nova Chemicals (International) S.A., Switz.  
SOURCE: U.S. Pat. Appl. Publ., 12pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060189769	A1	20060824	US 2005-64293	20050222
CA 2533066	A1	20060822	CA 2006-2533066	20060117

WO 2006089394

A1 20060831

WO 2006-CA66

20060123

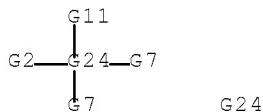
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 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,  
 KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,  
 MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,  
 SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
 VN, YU, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

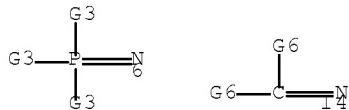
US 2005-64293 20050222

AB Olefin polymers having a conventional comonomer incorporation, a reverse (or partial reverse) comonomer incorporation or a substantially flat comonomer incorporation with a broad, bimodal or multimodal mol. weight distribution are produced under polymerization conditions using a single site catalyst with the combination of a phosphinimine and/or ketimide compound, and an Al compound in a cyclical controlled increase of the C<sub>2</sub>H<sub>4</sub>/H ratio and controlled or uncontrolled decrease of the C<sub>2</sub>H<sub>4</sub>/H ratio if plotted as a function of time. Thus, polymerization of C<sub>2</sub>H<sub>4</sub> and hexene 60 min at 70° and H 30 psia in the presence of (tert-bu<sub>3</sub>PN)C<sub>6</sub>F<sub>5</sub>(n-bu)CpTiCl<sub>2</sub> (preparation given), triisobutyl aluminum, and MAO gave bimodal copolymer having polydispersity 20.5.

MSTR 1A



G2 = 6 / 14



G3 = H / halo / carbon chain <containing 1-20 C>  
 (opt. substd. by 1 or more G21) /  
 carbocycle <containing 3-20 C> (opt. substd. by 1 or more  
 G21) / alkoxy <containing 1-8 C> /  
 aryl <containing 6-10 C> (opt. substd. by (1-3) G13) /  
 aryloxy <containing 6-10 C> (opt. substd. by (1-3) G13) /  
 NH<sub>2</sub> (opt. substd.) / 9 / 44 / (Specifically claimed: alkyl  
 <containing 1-10 C>)



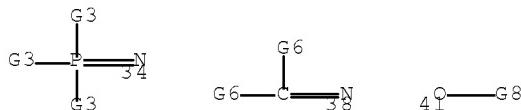
G4 = H / alkyl <containing 1-8 C> /  
       alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
       aryloxy <containing 6-10 C> / (Specifically claimed: Ph)  
 G6 = R <"substituent"> / (Specifically claimed: carbon  
       chain <containing 3 or more C> (opt. substd.) /  
       carbocycle <containing 3 or more C> (opt. substd.))  
 G7 = R <"activatable ligand"> /  
       (Specifically claimed: H / Cl / F /  
       carbon chain <containing 1-10 C>  
       (opt. substd. by 1 or more G23) /  
       carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)  
       / 18)

$_{18}^Q - G_8$

G8 = alkyl <containing 1 or more C>  
       (opt. substd. by 1 or more G23) /  
       aryl <containing 6-10 C> (opt. substd. by 1 or more G9)  
 G9 = halo / alkyl <containing 1-8 C> /  
       alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
       aryloxy <containing 6-10 C> / NH<sub>2</sub> /  
       alkylamino <containing 1-8 C> /  
       dialkylamino <each alkyl containing 1-8 C> / 20

$G_{10} - \overline{Z_0} - G_{10}$

G10 = alkyl <containing 1-8 C> / H  
 G11 = 34 / 38 / R <"activatable ligand"> /  
       (Specifically claimed: H / Cl / F /  
       carbon chain <containing 1 or more C>  
       (opt. substd. by 1 or more G23) /  
       carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)  
       / 41)



G12 = H / alkyl <containing 1-8 C> /  
       alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
       aryloxy <containing 6-10 C>  
 G13 = R / (Specifically claimed: alkyl <containing 1-4 C>)  
 G21 = R / halo  
 G23 = halo / alkoxy <containing 1-8 C> /  
       aryl <containing 6-10 C> / aryloxy <containing 6-10 C> /  
       NH<sub>2</sub> / alkylamino <containing 1-8 C> /  
       dialkylamino <each alkyl containing 1-8 C> / 73

$G_{10} - \overline{Z_3} - G_{10}$

G24 = R <"transition metal"> / (Specifically claimed: Ti /  
Zr / Hf)  
Patent location: claim 1

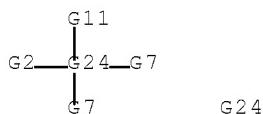
L17 ANSWER 11 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 145:456021 MARPAT Full-text  
TITLE: Dual reactor produced polyethylene resins for  
electronic packaging - film, tapes, bags and pouches  
INVENTOR(S): Goyal, Shivendra Kumar; Boparai, Ishkmandeep Kaur  
PATENT ASSIGNEE(S): Nova Chemicals Corporation, Can.  
SOURCE: Can. Pat. Appl., 44pp.  
CODEN: CPXXEB  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

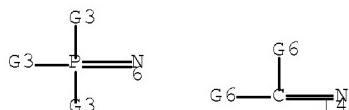
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2539806	A1	20061028	CA 2006-2539806	20060315
US 20060247373	A1	20061102	US 2005-116990	20050428
WO 2006113983	A1	20061102	WO 2006-CA362	20060315
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2005-116990 20050428

AB This invention relates to packaging films, tapes, bags and pouches having excellent optical properties and heat sealability, low hexane extractables and a good balance of phys. properties. These packaging and may be prepared from linear low d. polyethylene having a melt flow ratio (I21/I2) from about 23 to about 32, manufactured in a tandem dual reactor solution phase polymerization in the presence of a phosphinimine catalyst and co-catalyst system which comprises an aluminum based co-catalyst and ionic activator.

MSTR 4A





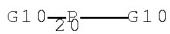
G3 = H / halo / carbon chain <containing 1-20 C>  
 (opt. substd. by 1 or more G21) /  
 carbocycle <containing 3-20 C> (opt. substd. by 1 or more  
 G21) / alkoxy <containing 1-8 C> /  
 aryl <containing 6-10 C> (opt. substd. by (1-3) G13) /  
 aryloxy <containing 6-10 C> (opt. substd. by (1-3) G13) /  
 NH2 (opt. substd.) / 9 / 44 / (Specifically claimed: alkyl  
 <containing 1-10 C>)



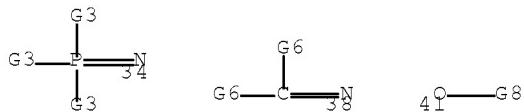
G4 = H / alkyl <containing 1-8 C> /  
 alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
 aryloxy <containing 6-10 C> / (Specifically claimed: Ph)  
 G6 = R <"substituent"> / (Specifically claimed: carbon  
 chain <containing 3 or more C> (opt. substd.) /  
 carbocycle <containing 3 or more C> (opt. substd.))  
 G7 = R <"activatable ligand"> /  
 (Specifically claimed: H / Cl / F /  
 carbon chain <containing 1-10 C>  
 (opt. substd. by 1 or more G23) /  
 carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)  
 / 18)



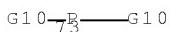
G8 = alkyl <containing 1 or more C>  
 (opt. substd. by 1 or more G23) /  
 aryl <containing 6-10 C> (opt. substd. by 1 or more G9)  
 G9 = halo / alkyl <containing 1-8 C> /  
 alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
 aryloxy <containing 6-10 C> / NH2 /  
 alkylamino <containing 1-8 C> /  
 dialkylamino <each alkyl containing 1-8 C> / 20



G10 = alkyl <containing 1-8 C> / H  
 G11 = 34 / 38 / R <"activatable ligand"> /  
 (Specifically claimed: H / Cl / F /  
 carbon chain <containing 1 or more C>  
 (opt. substd. by 1 or more G23) /  
 carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)  
 / 41)



G12 = H / alkyl <containing 1-8 C> /  
       alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
       aryloxy <containing 6-10 C>  
 G13 = R / (Specifically claimed: alkyl <containing 1-4 C>)  
 G21 = R / halo  
 G23 = halo / alkoxy <containing 1-8 C> /  
       aryl <containing 6-10 C> / aryloxy <containing 6-10 C> /  
       NH<sub>2</sub> / alkylamino <containing 1-8 C> /  
       dialkylamino <each alkyl containing 1-8 C> / 73



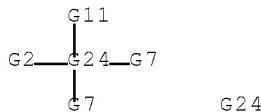
G24 = R <"transition metal"> / (Specifically claimed: Ti /  
       Zr / Hf)  
 Patent location: claim 2

L17 ANSWER 12 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 145:315400 MARPAT Full-text  
 TITLE: Dual reactor polyethylene resins with balanced physical properties  
 INVENTOR(S): Boparai, Ishkmandeep Kaur; Goyal, Shivendra Kumar  
 PATENT ASSIGNEE(S): Nova Chemicals Corporation, Can.  
 SOURCE: Can. Pat. Appl., 31pp.  
 CODEN: CPXXEB  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

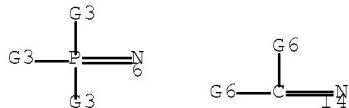
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2533120	A1	20060908	CA 2006-2533120	20060117
US 20060205898	A1	20060914	US 2005-75322	20050308
WO 2006094374	A1	20060914	WO 2006-CA67	20060123
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.:			US 2005-75322	20050308

AB Bags, other than food contact or medical bags, having a good balance of properties may be prepared from linear low d. polyethylene having a melt flow ratio (I<sub>21</sub>/I<sub>2</sub>) .apprx.23-32, prepared in a tandem dual reactor solution phase polymerization in the presence of a phosphinimine metal complex catalyst and an Al activator in the first reactor and an ionic activator in the second reactor.

MSTR 1A



G2 = 6 / 14



G3 = H / halo / carbon chain <containing 1-20 C>  
(opt. substd. by 1 or more G21) /  
carbocycle <containing 3-20 C> (opt. substd. by 1 or more  
G21) / alkoxy <containing 1-8 C> /  
aryl <containing 6-10 C> (opt. substd. by (1-3) G13) /  
aryloxy <containing 6-10 C> (opt. substd. by (1-3) G13) /  
NH<sub>2</sub> (opt. substd.) / 9 / 44 / (Specifically claimed: alkyl  
<containing 1-10 C>)



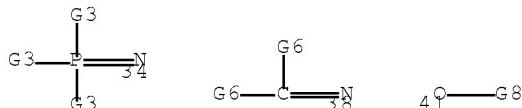
G4 = H / alkyl <containing 1-8 C> /  
alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
aryloxy <containing 6-10 C> / (Specifically claimed: Ph)  
G6 = R <"substituent"> / (Specifically claimed: carbon  
chain <containing 3 or more C> (opt. substd.) /  
carbocycle <containing 3 or more C> (opt. substd.))  
G7 = R <"activatable ligand"> /  
(Specifically claimed: H / Cl / F /  
carbon chain <containing 1-10 C>  
(opt. substd. by 1 or more G23) /  
carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)  
/ 18)

18—G8

G8 = alkyl <containing 1 or more C>  
     (opt. substd. by 1 or more G23) /  
     aryl <containing 6-10 C> (opt. substd. by 1 or more G9)  
 G9 = halo / alkyl <containing 1-8 C> /  
     alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
     aryloxy <containing 6-10 C> / NH2 /  
     alkylamino <containing 1-8 C> /  
     dialkylamino <each alkyl containing 1-8 C> / 20

G10—<sub>7B</sub>—G10

G10 = alkyl <containing 1-8 C> / H  
 G11 = 34 / 38 / R <"activatable ligand"> /  
     (Specifically claimed: H / Cl / F /  
     carbon chain <containing 1 or more C>  
     (opt. substd. by 1 or more G23) /  
     carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)  
     / 41)



G12 = H / alkyl <containing 1-8 C> /  
     alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /  
     aryloxy <containing 6-10 C>  
 G13 = R / (Specifically claimed: alkyl <containing 1-4 C>)  
 G21 = R / halo  
 G23 = halo / alkoxy <containing 1-8 C> /  
     aryl <containing 6-10 C> / aryloxy <containing 6-10 C> /  
     NH2 / alkylamino <containing 1-8 C> /  
     dialkylamino <each alkyl containing 1-8 C> / 73

G10—<sub>7B</sub>—G10

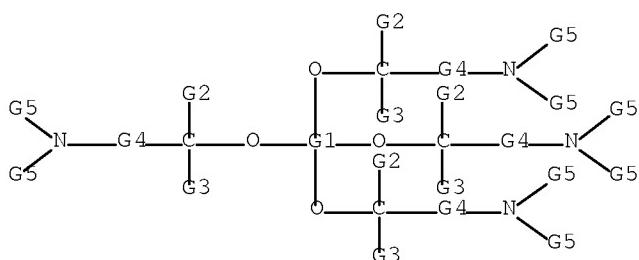
G24 = R <"transition metal"> / (Specifically claimed: Ti /  
       Zr / Hf)  
 Patent location: claim 2

L17 ANSWER 13 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 143:316927 MARPAT Full-text  
 TITLE: Alkoxide compound, raw material for thin film  
          formation and process for producing thin film  
 INVENTOR(S): Sato, Hiroki; Sakurai, Atsushi  
 PATENT ASSIGNEE(S): Asahi Denka Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 35 pp.  
         CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005085175	A1	20050915	WO 2005-JP2118	20050214
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CN 1914150	A	20070214	CN 2005-80004018	20050214
DE 112005000134	T5	20070215	DE 2005-11200500013420050214	
US 20090035464	A1	20090205	US 2006-588187	20060802
KR 2006111694	A	20061027	KR 2006-716119	20060810
PRIORITY APPLN. INFO.:			JP 2004-41427	20040218
			WO 2005-JP2118	20050214

AB An alkoxide compd. is described, that is represented by the following general formula  $M[OCR1R2ANR3R4]n$ , where one of R1 and R2 is a C1-C4 alkyl while the other is a H atom or C1-C4 alkyl; each of R3 and R4 is a C1-C4 alkyl; A is a C1-C8 alkanediyl; M is a Si or Hf atom; and n is 4, and is suitable to a raw material for thin film formation for use in a process of thin film formation though compound evaporation, such as CVD process. Further, there is provided a raw material for thin film formation comprising the above alkoxide compound Still further, there is provided a process for producing a thin film, comprising vaporizing the above raw material for thin film formation to thereby obtain a vapor containing the alkoxide compound, introducing the vapor onto a substratum, and performing decomposition and/or chemical reaction thereof to thereby form a thin film on the substratum.

#### MSTR 1A



G1 = Si / Hf  
G2 = Me / Et / Pr-n / Pr-i / Bu-n / Bu-i / Bu-s / Bu-t

G3 = H / Me / Et / Pr-n / Pr-i / Bu-n / Bu-i / Bu-s / Bu-t

G4 = alkylene <containing 1-8 C> /  
(Specifically claimed: CH<sub>2</sub>)

G5 = Me / Et / Pr-n / Pr-i / Bu-n / Bu-i / Bu-s / Bu-t

Patent location: claim 1

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 14 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 144:55443 MARPAT Full-text  
TITLE: Synthesis of hybrid metal oxide thin films by liquid phase deposition from organic compound solubility agent and metal alkoxides and halides for electronic and opto-electronic devices  
INVENTOR(S): Karkkainen, Ari  
PATENT ASSIGNEE(S): Oy, Bragone, Finland  
SOURCE: U.S. Pat. Appl. Publ., 17 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050277274	A1	20051215	US 2004-868624	20040615
US 7094709	B2	20060822		
WO 2005123595	A1	20051229	WO 2005-FI280	20050615
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1761462	A1	20070314	EP 2005-754070	20050615
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
JP 2008503331	T	20080207	JP 2007-515975	20050615
KR 2007027705	A	20070309	KR 2007-701039	20070115
US 20080022896	A1	20080131	US 2007-629562	20070129
PRIORITY APPLN. INFO.:			US 2004-868624	20040615
			WO 2005-FI280	20050615

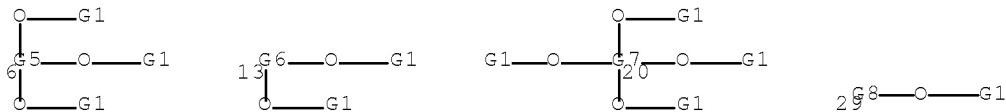
AB The present invention relates to metal oxide coating materials that can be used as thin film thin film coatings on various substrate surfaces. The invention also concerns a method of making metal oxide material which are stable in aqueous phase and that can be deposited on a substrate by liquid phase deposition, such as spin-on deposition. The new materials can be patterned lithog. or non-lithog. and are applicable for building up various electronic and opto-electronic device structures, such as antireflection layers, high-k interlayer and gate oxide structures for ICs, etch stop layer, CMP stop layer, solar cells, OLEDs packaging, optical thin film filters, optical diffractive grating applications and hybrid thin film diffractive grating structures.

G1—O—G4

G1 = carbon chain <0 or more double bonds,  
0 or more triple bonds> (opt. substd. by (1-3) G2) /  
carbocycle <non-aromatic, 0 or more double bonds>  
(opt. substd. by (1-3) G2) / 4

G3=O

G2 = OH / CO2H / NO2 / CONH2 (opt. substd.)  
G3 = carbon chain <0 or more double bonds,  
0 or more triple bonds> (opt. substd. by (1-3) G2) /  
carbocycle <non-aromatic, 0 or more double bonds>  
(opt. substd. by (1-3) G2)  
G4 = 6 / 13 / 20 / 29



G5 = R <"metal atom"> / (Specifically claimed: Ge / Ti /  
Sn / Hf / Zr / Si)  
G6 = R <"metal atom"> / (Specifically claimed: Ti / Sb)  
G7 = R <"metal atom"> / (Specifically claimed: Ta / Sb)  
G8 = R <"metal atom"> / (Specifically claimed: Sn)  
Patent location: claim 17

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

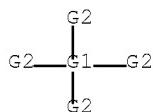
L17 ANSWER 15 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 140:199912 MARPAT Full-text  
TITLE: Production of polyesters in the presence of metal  
complexes  
INVENTOR(S): Rafler, Gerald; Kommolk, Ralf; Otto, Brigitta  
PATENT ASSIGNEE(S): Zimmer A.-G., Germany  
SOURCE: Ger. Offen., 13 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10337522	A1	20040226	DE 2003-10337522	20030814
PRIORITY APPLN. INFO.:			DE 2003-10337522	20030814

AB A process for prodn. of a polyester is carried out in the presence of a metal complex of the general formula (R1O)(R2O)M(OR3)(OR4), where M is Ti, Zr or Hf; the substituents R1-R4 are independently selected from H, -PO(OR1')(OR2'), -PO(R5)(OR3'), -SO2R4', -CR6=X, -CR7=CR8-CR9=X, -P(=X)(OR10)(OR11), -P(=X)(=CR12R13), -PO(OH)-O-P(=X)(OR5')(OR6'), -PO(OR7')-O-P(=X)O, and -

CR14R8'-C(=X)OA, substituted or unsubstituted aryl, alkyl, alkenyl, aminoalkyl, and (N-alkylenediamino)alkyl groups; the substituents R1 and R2, R1 and R3, R1 and R4, R2 and R3, R2 and R4 and/or R3 and R4 can form at least one bridging ligand, such as -PO(OR15)-O-PO-(OR16)-; A is selected from alkali metal and ammonium; the substituents R5-R16 are independently selected from H, -PO(OR9')(OR10'), -HPOOR11', -SO<sub>2</sub>R12', substituted or unsubstituted alkyl and aryl groups; the substituents R1'-R12' are independently selected from substituted or unsubstituted alkyl and aryl groups; the substituent X is O or S; and at least one of the substituents R1-R4 is different from H, alkyl or aryl group. The method provides high mol. weight polyesters (> 22,000 g/mol) without the need for a solid phase post-polycondensation stage. Thus, bis(2-hydroxyethyl) terephthalate was polymerized at 270° in the presence of 16.5 ppm of bis(ammonium lactato)titanium dihydroxide to produce poly(ethylene terephthalate) having intrinsic viscosity of 0.85 dL/g and an acid value of 23.4 mmol/kg.

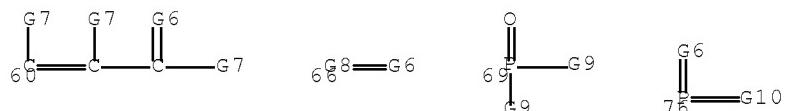
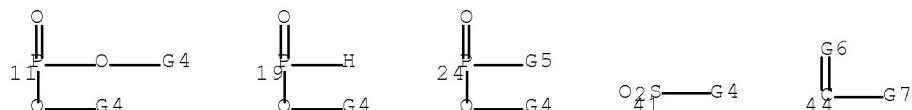
MSTR 1A

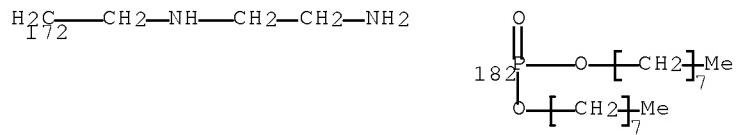
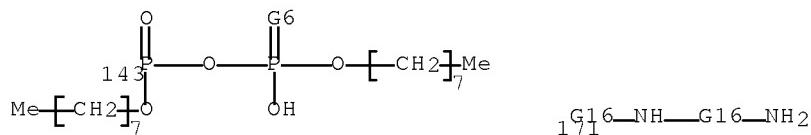
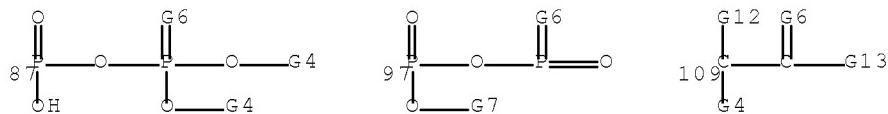


G1 = Ti / Zr / Hf  
G2 = OH / 15

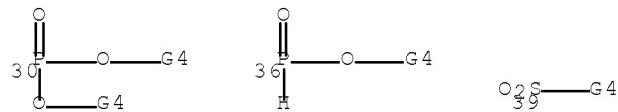


G3 = 11 / 19 / 24 / 41 / 44 / 60 / 66 / 69 / 76 / 87 /  
97 / 109 / aryl (opt. subst.) /  
alkyl (opt. subst. by G17) / alkenyl (opt. subst.) / 171 /  
(Examples: 136 / 140 / 143 / octyl / Pr-i / 172 / 182)

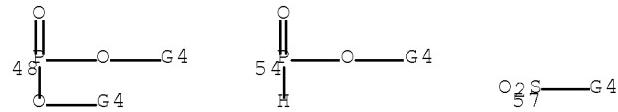




G4 = alkyl (opt. subst.) / aryl (opt. subst.)  
 G5 = 30 / 36 / 39 / alkyl (opt. subst.) /  
 aryl (opt. subst.)



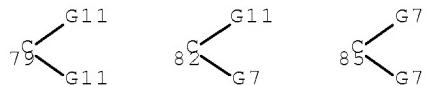
G6 = O / S  
 G7 = H / 48 / 54 / 57 / aryl (opt. subst.)



G8 = carbon chain <1 double bond>  
 (opt. subst. by (up to 3) G7)  
 G9 = OH / 73

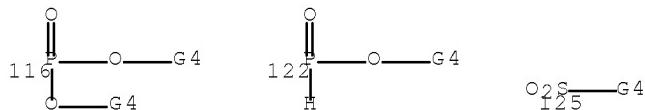


G10 = 79 / 82 / 85

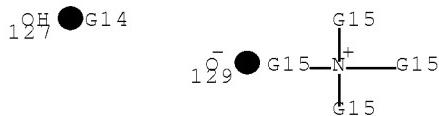


G11 = alkyl (opt. subst.)

G12 = H / 116 / 122 / 125 / alkyl (opt. subst.) /  
aryl (opt. subst.)



G13 = 127 / 129



G14 = alkali metal atom / NH3 (opt. subst.)

G15 = R

G16 = alkylene (opt. subst.)

G17 = R / NH2

Patent location: claim 1

L17 ANSWER 16 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 139:85793 MARPAT [Full-text](#)

TITLE: Catalytic composition and process for the selective oligomerization of ethylene to light linear alpha-olefins

INVENTOR(S): Biagini, Paolo; Gila, Liliana

PATENT ASSIGNEE(S): Polimeri Europa S.p.A., Italy

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

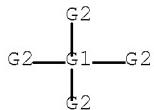
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003053573	A2	20030703	WO 2002-EP13957	20021209
WO 2003053573	A3	20030821		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				

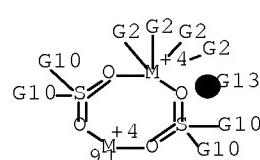
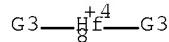
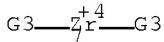
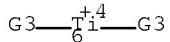
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 IT 2001MI2629 A1 20030613 IT 2001-MI2629 20011213  
 AU 2002358113 A1 20030709 AU 2002-358113 20021209  
 EP 1453604 A2 20040908 EP 2002-791797 20021209  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK  
 US 20050070425 A1 20050331 US 2004-497537 20041109  
 PRIORITY APPLN. INFO.: IT 2001-MI2629 20011213  
 WO 2002-EP13957 20021209

**AB** The invention relates to a catalytic compn. for the selective oligomerization of ethylene and a process for preparing light linear  $\alpha$ -olefins, especially 1-hexene and 1-octene, starting from ethylene, using this composition, said composition comprising: (A) a compound of a transition metal M of Group 4 of the periodic table; (B) an organic compound containing the sulfonic group ( $>\text{SO}_2$ ) bonded to two carbon atoms; (C) a hydrocarbyl organometallic compound of a metal M' selected from elements of Groups 1, 2, 12, 13 or 14 of the periodic table; components (A), (B) and (C) being in such a quantity that the atomic ratios resp. of the metal M in (A), of the sulfur S in the sulfonic group of (B) and of the metal M' in (C), respect the following proportions: S/M = (from 0 to 20)/1 and M'/M = (from 2 to 2000)/1, on the condition that when the compound of the metal M in component (A) is not a sulfonic complex of M, the S/M ratio is greater than 0.5, preferably greater than 1.

MSTR 1

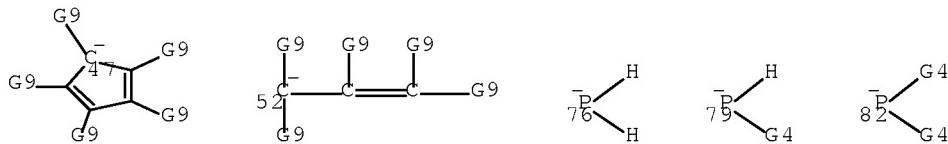
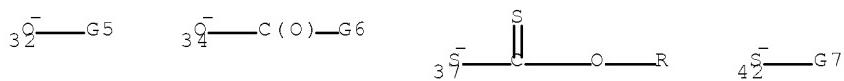
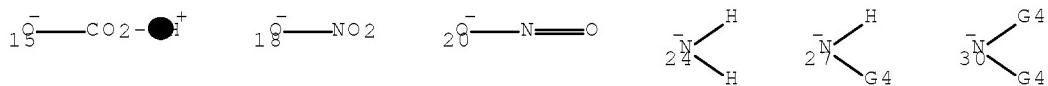


G1 = 6 / 7 / 8 / (Specifically claimed: 91)

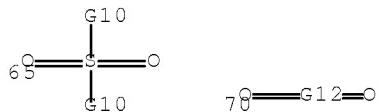


**G2** = R <"ligand", (-1) charge> /  
 (Specifically claimed: chloride / bromide / hydroxide / 15 /  
 18 / 20 / 24 / 27 / 30 / 76 / 79 / 82 /  
 heterocycle <containing zero or more N, zero or more P,  
 attached through 1 or more heteroatoms, (-1) charge> / 32 /  
 34 / 37 / 42 / carbon chain <containing up to 15 C,  
 (-1) charge> (opt. subst. by 1 or more G8) /  
 carbocycle <containing up to 15 C, (-1) charge>  
 (opt. subst. by 1 or more G8) /  
 alkyl <containing up to 15 C, (-1) charge>

(opt. substd. by 1 or more G8) /  
 aryl <containing up to 15 C, (-1) charge>  
 (opt. substd. by 1 or more G8) / 47 / 52)



G3 = R <"neutral organic ligand"> /  
 (Specifically claimed: 65 / 70)



G4 = alkyl <containing 1-20 C> /  
 aryl <containing up to 20 C>  
 G5 = alkyl <containing 1-10 C>  
 G6 = R /  $\text{NH}_2$  (opt. substd.)  
 G7 = alkyl  
 G8 = R / halo / Cl / F / R <"anionic group">  
 G9 = H / R / halo / Cl / F / R <"anionic group">  
 G10 = carbon chain <containing 1-20 C>  
     (opt. substd. by 1 or more G11) /  
     carbocycle <containing up to 20 C, non-aromatic>  
     (opt. substd. by 1 or more G11) /  
     aryl <containing up to 20 C> (opt. substd. by 1 or more G11)  
     / R <"heteroatom-containing hydrocarbon", containing 1-20 C>  
     / (Examples: Et / Ph / Me)  
 G11 = halo / R  
 G12 = heterocycle <containing 1 or more S, 4-20 C,  
       attached through 1 S>  
 G13 = Ti / Zr / Hf

Patent location:

claim 4

Note:

additional ligands, metal valences, and ring formation also claimed

REFERENCE COUNT:

6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

## RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 17 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 139:53470 MARPAT Full--text  
 TITLE: Complexes with sulfonic ligands for selective oligomerization of ethylene  
 INVENTOR(S): Biagini, Paolo; Gila, Liliana  
 PATENT ASSIGNEE(S): Polimeri Europa S.P.A., Italy  
 SOURCE: PCT Int. Appl., 45 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003050126	A1	20030619	WO 2002-EP13955	20021209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
IT 2001MI2630	A1	20030613	IT 2001-MI2630	20011213
AU 2002356640	A1	20030623	AU 2002-356640	20021209
PRIORITY APPLN. INFO.:			IT 2001-MI2630	20011213
			WO 2002-EP13955	20021209

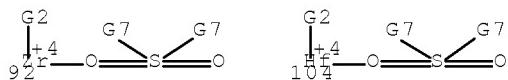
AB Sulfonic complexes having the formula  $[MX_1X_2X_3(X_4)_nY_m]_s$  where M = Zr or Hf; X<sub>1-4</sub> = any organic or inorg., mono-anionic ligand; Y = ligand consisting of a neutral sulfonic compound coordinated to the metal M by  $\geq 1$  O atom; n = 0 or 1, if the oxidation state of the metal M is 3 or 4; m  $\leq 2$ , preferably 1-2; and s = 1-6. The complexes, combined with an alkylating organometallic compound, e.g. alkyl aluminum halide, gave oligomerization catalysts for ethylene, selective towards the production of 1-hexene and 1-octene. Catalysts such as zirconium tetrachloride bis-dimethylsulfone were prepared

MSTR 1A

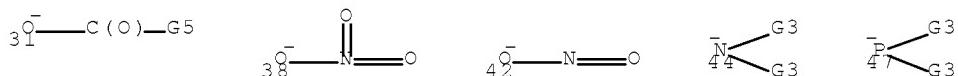


G1 = 7 / 8 / 92 / 104





G2 = R <"ligand", (-1) charge> / chloride /  
 (Specifically claimed: hydroxide / 31 / 38 / 42 / 44 / 47 /  
 49 / 55 / 60 / 63 / carbon chain <containing 1-15 C,  
 (-1) charge> (opt. substd. by G9) /  
 carbocycle <containing 3-15 C, (-1) charge>  
 (opt. substd. by G9))



G3 = H / alkyl <containing 1-20 C> /  
 aryl <containing 6-20 C>  
 G4 = alkyl <containing 1-10 C>  
 G5 = 33 / 87 / NH<sub>2</sub> (opt. substd.) / H /  
 carbon chain (opt. substd.) / R



G6 = H / R  
 G7 = carbon chain (opt. substd. by 1 or more G8) /  
 carbocycle (opt. substd. by 1 or more G8) / (Examples: Me /  
 Ph)  
 G8 = R / (Specifically claimed: halo)  
 G9 = halo / Cl / F / R  
 G10 = 88 / 91



Patent location: claim 1  
 Note: additional ligands, metal valences, and ring formation also

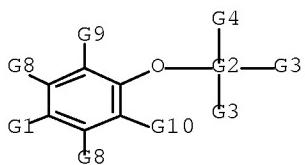
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

TITLE: A catalyst system and its use in a polymerization process  
 INVENTOR(S): Gindelberger, David E.; McConville, David H.  
 PATENT ASSIGNEE(S): Univation Technologies, LLC, USA  
 SOURCE: PCT Int. Appl., 43 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002006358	A1	20020124	WO 2001-US19508	20010618
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2416197	A1	20020124	CA 2001-2416197	20010618
EP 1303543	A1	20030423	EP 2001-942214	20010618
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001012516	A	20030909	BR 2001-12516	20010618
JP 2004504420	T	20040212	JP 2002-512258	20010618
US 20050043497	A1	20050224	US 2003-688870	20031017
PRIORITY APPLN. INFO.:			US 2000-617663	20000717
			WO 2001-US19508	20010618

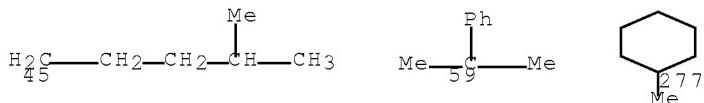
**AB** Disclosed is a catalyst system including a phenoxide transition metal catalyst compound and a Lewis acid containing activator, a supported catalyst system thereof, a method of preparing the catalyst system and a process for polymerizing olefin(s) using same. Thus, 0.42 g bis(N-benzylidene-2-hydroxy-3,5-di-tert-butylbenzylamine) zirconium(IV) dibenzyl in toluene and 1 g treated silica were stirred for 10 min, filtered, and 0.1 g of which was used as a catalyst to polymerize ethylene.

MSTR 2



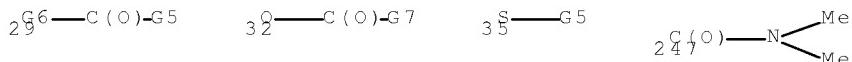
**G1** = H / R <"heteroatom-containing group",  
 containing 1 or more heteroatoms> /  
 hydrocarbyl <containing 1-100 C> /  
 (Specifically claimed: Bu-t / C(Me)2CH2Me / 59 /  
 C(Me)2CH2CMe3 / 277 / SiMe3) / (Examples: alkyl <containing  
 4-20 C> / Bu-n / Bu-i / pentyl / hexyl / heptyl / 45 /

octyl / decyl / nonyl / dodecyl)

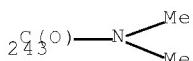


G2 = R <"Group 3 to 10 transition metal or lanthanide metal"> / (Specifically claimed: Zr / Ti / Hf)

G3 = R <"anionic ligand"> /  
(Specifically claimed: CH<sub>2</sub>Ph / Cl / NMe<sub>2</sub> / 247) /  
(Examples: halo / alkyl / 29 / 32 / 35 / H / alkoxy)



G4 = R <"anionic ligand"> / 27 /  
(Specifically claimed: CH<sub>2</sub>Ph / Cl / NMe<sub>2</sub> / 243) /  
(Examples: halo / alkyl / 37 / 40 / 43 / H / alkoxy)

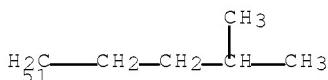


G5 = H / R

G6 = NH / O

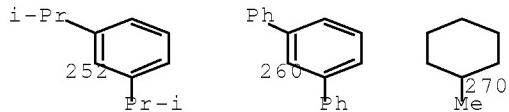
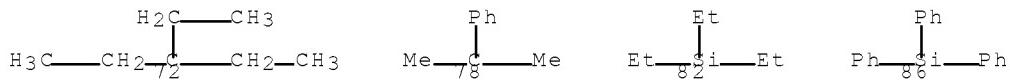
G7 = NH<sub>2</sub> (opt. substd.)

G8 = H / R <"heteroatom-containing group",  
containing 1 or more heteroatoms> /  
hydrocarbyl <containing 1-100 C> /  
(Examples: alkyl <containing 4-20 C> / Bu-n / Bu-i / Bu-t /  
pentyl / hexyl / heptyl / 51 / octyl / decyl / nonyl /  
dodecyl)

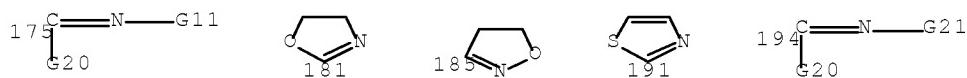
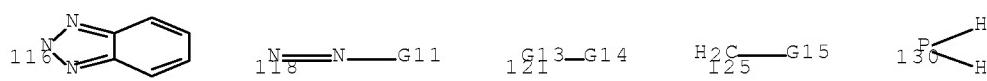
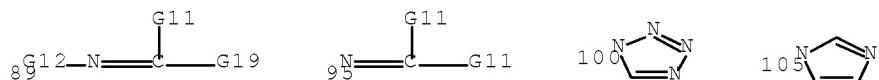


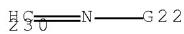
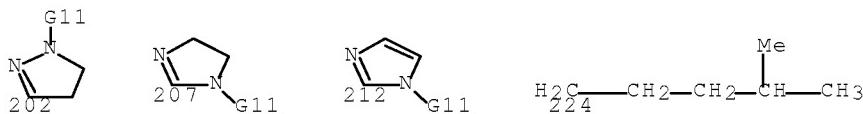
G9 = H / R <"heteroatom-containing group",  
containing 1 or more heteroatoms> /  
hydrocarbyl <containing 1-100 C> /  
(Specifically claimed: Bu-t / C(Me)<sub>2</sub>CH<sub>2</sub>Me / 78 / CPh<sub>3</sub> /  
SiMe<sub>3</sub> / Ph / 252 / 260 / C(Me)<sub>2</sub>CH<sub>2</sub>CMe<sub>3</sub> / 270) /

(Examples: 72 / 82 / 86)



G10 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Specifically claimed: 116 / OMe / 230) / (Examples: 89 / 95 / 100 / 105 / 118 / NH<sub>2</sub> / 121 / OH / 125 / 130 / 133 / 136 / SH / 147 / 149 / 152 / 160 / 175 / 181 / 185 / 191 / 2-pyridyl / 194 / 202 / 207 / 212 / alkyl <containing 4-20 C> / Bu-n / Bu-i / Bu-t / pentyl / hexyl / heptyl / 224 / octyl / decyl / nonyl / dodecyl)





G11 = H / alkyl / aryl / SiH<sub>3</sub> (opt. substd.) / OH / 169



G12 = CH<sub>2</sub> (opt. substd.)  
G13 = NH / 123 / O



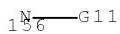
G14 = alkyl / aryl / SiH<sub>3</sub> (opt. substd.) / OH / 171



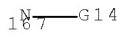
G15 = OH / 127 / 139 / 142 / 145 / SH / 163 / NH<sub>2</sub> / 165



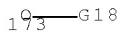
G16 = O / S / 156



G17 = NH / 167



G18 = alkyl / aryl / SiH<sub>3</sub> (opt. substd.)  
G19 = H / alkyl / aryl / SiH<sub>3</sub> (opt. substd.) / OH / 173 /  
(Specifically claimed: Ph)

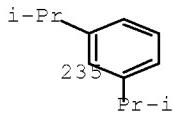


G20 = H / Me / Bu-t

G21 = NH<sub>2</sub> / 198 / OH / 200

198-7-G14 200-G14

G22 = Ph / Me / Et / Pr-i / Bu-t / CH<sub>2</sub>Ph / Bu-i / hexyl / 235



Patent location:

claim 8

Note:

substitution is restricted

Note:

additional ring formation and bridging also claimed

Note:

and metal salts and complexes

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 19 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 137:109632 MARPAT Full-text

TITLE: Functional organic particles for polymerization catalyst supports

INVENTOR(S): Hoang, Peter Phung Minh; Russell, Charles; Kearns, Jason Roy; Wanke, Sieghard E.; Lynch, David T.; Li, Nai-hong

PATENT ASSIGNEE(S): The Governors of the University of Alberta, Can.

SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

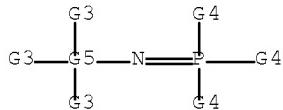
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020103073	A1	20020801	US 2000-728843	20001201
US 6583082	B2	20030624		
CA 2365539	A1	20020601	CA 2001-2365539	20011130
US 20030199389	A1	20031023	US 2003-427027	20030430
US 6750303	B2	20040615		

PRIORITY APPLN. INFO.: US 2000-728843 20001201

AB A functionalized polymeric support for use in assocn. with a catalyst system comprising a co-catalyst of the formula R<sub>12</sub>AlO(R<sub>1</sub>AlO)<sub>m</sub>AlR<sub>12</sub> wherein each R<sub>1</sub> is independently selected from the group consisting of C<sub>1</sub>-20 hydrocarbyl radicals and m is from 3 to 50, the support comprising the suspension or emulsion polymerization product of a feedstock comprising: (i) from 0 to 95% of one or more C<sub>4</sub>-12 vinyl monomers; (ii) from 50 to 2% of a crosslinking agent; and (iii) from 70 to 3% of a functionalized monomer containing a reactive functional group selected from the group consisting of C<sub>1</sub>-8 hydroxy esters of C<sub>3</sub>-6 ethylenically unsatd. carboxylic acids, and chloride derivs. thereof (e.g., hydroxyethyl methacrylate); and having a particle size from 0.1 to 1000  $\mu\text{m}$ , surface area of greater than 10 m<sup>2</sup>/g and a pore volume of at least 0.2 cc/g of support. The supports can increase the activity of these catalysts

which results in improved ethylene polymerization. A support for a metallocene catalyst/MAO cocatalyst was prepared from divinylbenzene, hydroxyethyl methacrylate, and styrene.

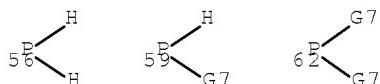
MSTR 2B



G3 = R <"ligand"> / 16 / (Specifically claimed: H / halo / Cl / F / carbon chain <containing 1-10 C> (opt. substd. by 1 or more G10) / carbocycle <containing up to 10 C> (opt. substd. by 1 or more G10) / 53)



G4 = H / R / (Specifically claimed: Bu-t)  
 G5 = R <"transition metal"> / (Specifically claimed: Ti / V / Zr / Hf / Cr / Fe / Co / Ni / Pd)  
 G7 = alkyl <containing 1-8 C>  
 G9 = alkyl <containing 1-10 C> (opt. substd. by 1 or more G10) / aryl <containing up to 10 C> (opt. substd. by 1 or more G10)  
 G10 = halo / alkyl <containing 1-8 C> / alkoxy <containing 1-8 C> / aryl <containing 6-10 C> / aryloxy <containing 6-10 C> / NH<sub>2</sub> / alkylamino <containing 1-8 C> / dialkylamino <each alkyl containing 1-8 C> / 56 / 59 / 62



Patent location: claim 21  
 Note: additional ligands and ring formation also claimed

L17 ANSWER 20 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 136:20341 MARPAT Full-text  
 TITLE: Manufacture of esters of unsaturated carboxylic acids by transesterification  
 INVENTOR(S): Nestler, Gerhard; Schroeder, Juergen  
 PATENT ASSIGNEE(S): Basf A.-G., Germany  
 SOURCE: PCT Int. Appl., 22 pp.  
 CODEN: PIXXD2

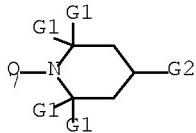
DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001092198	A1	20011206	WO 2001-EP6079	20010528
W: CN, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
DE 10026644	A1	20011206	DE 2000-10026644	20000529
EP 1284954	A1	20030226	EP 2001-960249	20010528
EP 1284954	B1	20040804		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
CN 1213995	C	20050810	CN 2001-810444	20010528
US 20030139599	A1	20030724	US 2002-276318	20021125
US 6875888	B2	20050405		

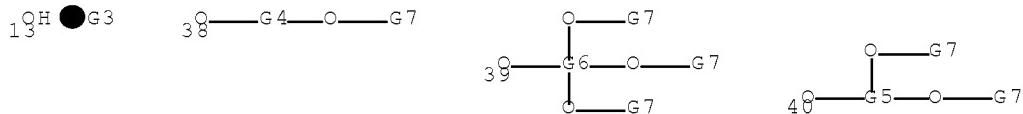
PRIORITY APPLN. INFO.: DE 2000-10026644 20000529  
 WO 2001-EP6079 20010528

AB C1-4 Alkyl esters of unsatd. carboxylic acids are transesterified with alcs. ROH [R = C4-20 alkyl, C5-7 cycloalkyl, phenyl(C1-4 alkyl), amino-, hydroxy-, alkoxy-substituted (O-interrupted) C2-12 alkyl] in the presence of metal alcoholates comprising  $\geq 1$  R10 group (R1 = 2,2,6,6-tetraalkyl-1-oxy-4-piperidinyl) as transesterification catalysts. For example, transesterification of Et acrylate with Me<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>OH in the presence of tetra(2,2,6,6-tetramethylpiperidinyl-1-oxy-4-oxy) titanate [preparation from (Me<sub>2</sub>CHO)<sub>4</sub>Ti and 4-hydroxy-2,2,6,6-tetramethylpiperidinyl-1-oxy given] gave CH<sub>2</sub>:CHCO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub> in 97.5% yield, vs. 94% when (Me<sub>2</sub>CHO)<sub>4</sub>Ti was used as transesterification catalyst.

MSTR 2

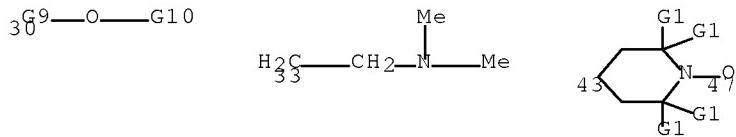


G1 = alkyl / (Specifically claimed: Me)  
 G2 = 13 / 38 / 40 / 39



G3 = Ti / Zr / Hf / Al / V / alkali metal atom /  
 alkaline earth metal atom  
 G4 = V / alkaline earth metal atom  
 G5 = Ti / Al / V  
 G6 = Ti / Zr / Hf / V

G7 = 43 / alkyl <containing 1-4 C> /  
 alkyl <containing 4-20 C> / cycloalkyl <containing 5-7 C> /  
 alkyl <containing 1-4 C> (substd. by Ph) /  
 alkyl <containing 2-12 C> (substd. by 1 or more G8) / 30 /  
 (Examples: Me / Et / 33)



G8 = dialkylamino <each alkyl containing 1-6 C> /  
 heterocycle <containing 1-2 heteroatoms, 1-2 N,  
 up to 1 O (no other heteroatoms),  
 5- to 7-membered monocyclic ring> / (up to 3) OH /  
 alkoxy <containing 1-4 C> / R

G9 = alkylene <containing 1 or more C>  
 (opt. substd. by 1 or more G8)

G10 = alkyl <containing 1 or more C>  
 (opt. substd. by 1 or more G8)

Patent location: claim 5

Note: oxygens at 7 and 47 are free radicals

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 21 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 135:61762 MARPAT Full-text

TITLE: Gas or slurry polymerization of olefins using spray dried catalyst composition

INVENTOR(S): Oskam, John H.; Lynn, Timothy R.; Morrison, Vincent P.

PATENT ASSIGNEE(S): Univation Technologies, LLC, USA

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

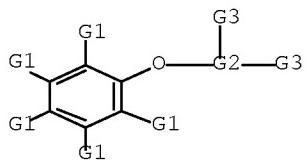
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001044321	A1	20010621	WO 2000-US13308	20000515
W: AU, BR, BY, CA, CN, CZ, ID, IL, IN, JP, KR, MX, NO, PL, RU, SG, SK, TR, ZA, AM, AZ, KG, KZ, MD, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6281306	B1	20010828	US 1999-464114	19991216
CA 2394516	A1	20010621	CA 2000-2394516	20000515
CA 2394516	C	20060718		
TW 500729	B	20020901	TW 2000-89109270	20000515
EP 1240213	A1	20020918	EP 2000-930739	20000515
EP 1240213	B1	20071205		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
TR 200201969	T2	20021223	TR 2002-1969	20000515
BR 2000017027	A	20030128	BR 2000-17027	20000515
EG 22572	A	20030430	EG 2000-629	20000515

JP 2003517058	T	20030520	JP 2001-544808	20000515
AU 776622	B2	20040916	AU 2000-48507	20000515
RU 2238281	C2	20041020	RU 2002-119207	20000515
CN 1206247	C	20050615	CN 2000-818181	20000515
AT 380203	T	20071215	AT 2000-930739	20000515
EP 1914252	A1	20080423	EP 2007-23470	20000515
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
ES 2298142	T3	20080516	ES 2000-930739	20000515
CZ 300207	B6	20090318	CZ 2002-2088	20000515
US 20010034423	A1	20011025	US 2001-867156	20010529
US 6656868	B2	20031202		
ZA 2002004775	A	20031203	ZA 2002-4775	20020613
NO 2002002851	A	20020815	NO 2002-2851	20020614
NO 327079	B1	20090420		
MX 2002005907	A	20040812	MX 2002-5907	20020614
IN 2002DN00605	A	20090116	IN 2002-DN605	20020614
NO 2008003814	A	20020815	NO 2008-3814	20080908
PRIORITY APPLN. INFO.:				
			US 1999-464114	19991216
			EP 2000-930739	20000515
			WO 2000-US13308	20000515

AB The title polymn. process comprises combining an olefin in the gas or slurry phase with a spray dried catalyst comprising an activator, a particulate filler and a metal catalyst compound such as a phenoxide or metallocene. Thus, slurry polymerization of C<sub>2</sub>H<sub>4</sub> at 65° in the presence of spray dried (Al/Zr ratio 536:1) 0.38 μmol catalyst of 0.075 g {[2,4,6-Me<sub>3</sub>C<sub>6</sub>H<sub>2</sub>)NCH<sub>2</sub>CH<sub>2</sub>]<sub>2</sub>NH}ZrBz<sub>2</sub>, 5 g Cabosil TS 610, and Me aluminoxane activator to give polyethylene at catalyst activity 233,800 g polymer/mmol catalyst/h.

MSTR 3



G1 = H / R / (Specifically claimed: alkyl <containing 4-20 C> / Bu-n / Bu-i / pentyl / hexyl / heptyl / isohexyl / octyl / decyl / undecyl / dodecyl)  
G2 = R <"Group 3 to 10 transition metal or lanathanide"> / 38 / (Specifically claimed: Ti / Zr / Hf)

<sub>3</sub>G<sub>5</sub>—G<sub>3</sub>

G3 = alkyl / halo / CH<sub>2</sub>Ph / NH<sub>2</sub> (opt. substd.) / 18 / 21 / 24 / H / alkoxy

<sub>1</sub>8—C(=O)—R      <sub>2</sub>9—C(=O)—G 4      <sub>2</sub>4—R

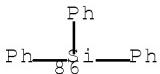
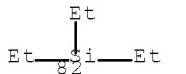
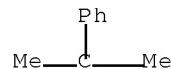
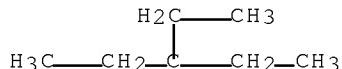
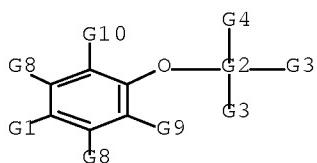
G4 = NH<sub>2</sub> (opt. substd.)  
G5 = R <"Group 3 to 10 transition metal or lanthanide">  
/ (Specifically claimed: Ti / Zr / Hf)  
Patent location: claim 28  
Note: additional metal valences and ring formation also claimed

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

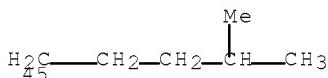
L17 ANSWER 22 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 135:318841 MARPAT Full-text  
TITLE: Production method of olefin polymerization catalysts  
INVENTOR(S): Whiteker, Gregory T.; Smith, Jack A.  
PATENT ASSIGNEE(S): Univation Technologies, LLC, USA  
SOURCE: U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S. Ser. No. 216,594.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20010031843	A1	20011018	US 1999-248147	19990210
US 6333389	B1	20011225		
WO 2000037512	A2	20000629	WO 1999-US29755	19991214
WO 2000037512	A3	20001019		
W: AU, BR, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 20020016254	A1	20020207	US 2001-932910	20010820
PRIORITY APPLN. INFO.:			US 1998-216594	19981218
			US 1999-248147	19990210

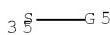
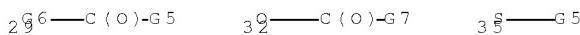
AB This invention relates to a catalyst system comprising an activator and at least one heteroatom substituted phenoxide group 3-10 transition metal or lanthanide metal compds. wherein the metal is bound to the oxygen of the phenoxide group and provided that: (a) if more than one heteroatom substituted phenoxide is present it is not bridged to the other heteroatom substituted phenoxide, (b) if the metal is a Group 4 metal then the carbon adjacent to the carbon bound to the oxygen of the phenoxide may not be bound to an aldehyde or an ester, (c) the carbon ortho to the carbon bound to the oxygen of the phenoxide may not be bound to the C1 carbon in a group represented by the formula: wherein R<sub>6</sub> and R<sub>7</sub> = independently H, halogen, a hydrocarbon group, a heterocyclic compound residue, an oxygen containing group, a nitrogen containing group, a boron containing group, an sulfur containing group, a phosphorus containing group, a silicon containing group, a germanium containing group, or a tin containing group, and R<sub>1</sub> and R<sub>2</sub> = may bonded to each other to form a ring. The activator may be an Al alkyl, an alumoxane, a modified alumoxane, a noncoordinating anion, a borane, a borate or a mixture thereof.



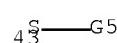
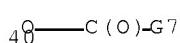
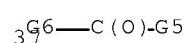
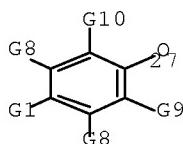
G1 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Examples: alkyl <containing 4-20 C> / Bu-n / Bu-i / Bu-t / pentyl / hexyl / heptyl / 45 / octyl / decyl / nonyl / dodecyl)



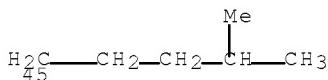
G2 = R <"Group 3-10 transition metal or lanthanide metal"> / (Specifically claimed: Zr / Ti / Hf)  
 G3 = R <"anionic ligand"> / (Specifically claimed: halo / alkyl / 29 / 32 / 35 / H / alkoxy)



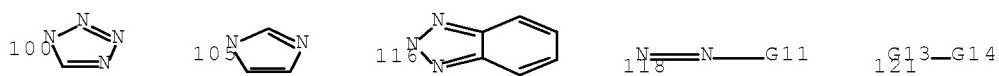
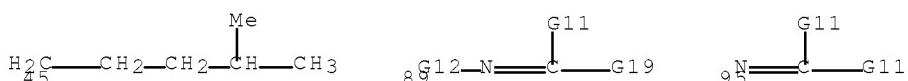
G4 = R <"anionic ligand"> / 27 / (Specifically claimed: halo / alkyl / 37 / 40 / 43 / H / alkoxy)



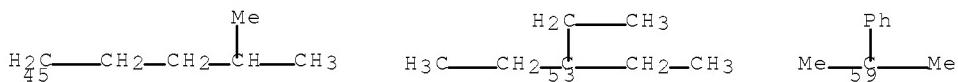
G5 = H / R  
 G6 = NH / O  
 G7 = NH2 (opt. substnd.)  
 G8 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Specifically claimed: Bu-n / Bu-i / Bu-t / pentyl / hexyl / heptyl / 45 / octyl / decyl / nonyl / dodecyl) / (Example: alkyl <containing 4-20 C>)

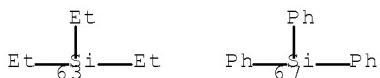


G9 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Examples: alkyl <containing 4-20 C> / Bu-n / Bu-i / Bu-t / pentyl / hexyl / heptyl / 45 / octyl / decyl / nonyl / dodecyl / 89 / 95 / 100 / 105 / 116 / 118 / NH2 / 121 / OH / 125 / 130 / 133 / 136 / SH / 147 / 149 / 152 / 160)



G10 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Specifically claimed: alkyl <containing 4-20 C> / Bu-n / Bu-i / Bu-t / pentyl / hexyl / heptyl / 45 / octyl / decyl / nonyl / dodecyl) / (Examples: C(Me)2CH2Me / 53 / 59 / CPh3 / SiMe3 / 63 / 67)





G11 = H / alkyl / aryl / SiH<sub>3</sub> (opt. substd.) / OH / 169



G12 = CH<sub>2</sub> (opt. substd.)  
 G13 = NH / 123 / O



G14 = alkyl / aryl / SiH<sub>3</sub> (opt. substd.) / OH / 171



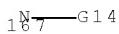
G15 = OH / 127 / 139 / 142 / 145 / SH / 163 / NH<sub>2</sub> / 165



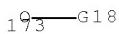
G16 = O / S / 156



G17 = NH / 167



G18 = alkyl / aryl / SiH<sub>3</sub> (opt. substd.)  
 G19 = H / alkyl / aryl / SiH<sub>3</sub> (opt. substd.) / OH / 173 /  
 (Example: Ph)



Patent location:

claim 12

Note:

substitution is restricted

Note:

additional ring formation also claimed

Note:

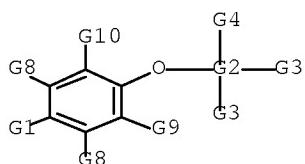
and metal complexes

ACCESSION NUMBER: 133:74465 MARPAT Full-text  
 TITLE: Olefin polymerization catalysts, their production and use  
 INVENTOR(S): Whiteker, Gregory T.; Smith, Jack A.  
 PATENT ASSIGNEE(S): Univation Technologies, LLC, USA  
 SOURCE: PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 20000037512	A2	20000629	WO 1999-US29755	19991214
WO 20000037512	A3	20001019		
	W: AU, BR, CA, JP			
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE			
US 20010031843	A1	20011018	US 1999-248147	19990210
US 6333389	B1	20011225		
PRIORITY APPLN. INFO.:			US 1998-216594	19981218
			US 1999-248147	19990210

**AB** This invention relates to a catalyst system comprising an activator and one or more heteroatom substituted phenoxide group 3 to 10 transition metal or lanthanide metal compds. wherein the metal is bound to the oxygen of the phenoxide group and provided that: (a) if more than one heteroatom substituted phenoxide is present it is not bridged to the other heteroatom substituted phenoxide; (b) if the metal is a group 4 metal then the carbon adjacent to the carbon bound to the oxygen of the phenoxide may not be bound to an aldehyde or an ester; and (c) the carbon ortho to the carbon bound to the oxygen of the phenoxide may not be bound to C1 carbon in group represented by C1R7:NR6 wherein R6 and R7 are independently hydrogen, halogen, a hydrocarbon group, a heterocyclic compound residue, an oxygen containing group, a nitrogen containing group, a boron containing group, a sulfur containing group, a phosphorus containing group, a silicon containing group, a germanium containing group, or a tin containing group, and R1 and R2 may be bonded to each other to form a ring. The activator may be an aluminum alkyl, an alumoxane, a modified alumoxane, a non-coordinating anion, a borane, a borate or a mixture thereof. Polyethylene was prepared using bis(N-benzylidene-2-hydroxy-3,5-di-tert-butylbenzylamine) zirconium(IV) dibenzyl and MAO catalysts.

MSTR 1A

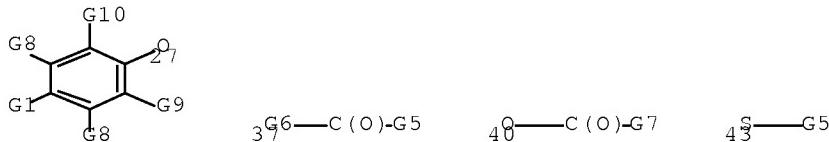


**G1** = H / R <"heteroatom-containing group",  
 containing 1 or more heteroatoms> /  
 hydrocarbyl <containing 1-100 C> / (Example: Bu-t)

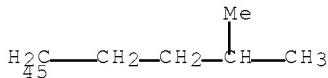
G2 = R <"Group 3-10 transition metal or lanthanide metal"> / (Specifically claimed: Zr / Ti) / (Example: Hf)  
 G3 = R <"anionic ligand"> / (Specifically claimed: halo / alkyl / 29 / 32 / 35 / H / alkoxy)



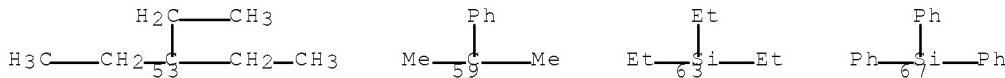
G4 = R <"anionic ligand"> / 27 /  
 (Specifically claimed: halo / alkyl / 37 / 40 / 43 / H / alkoxy)



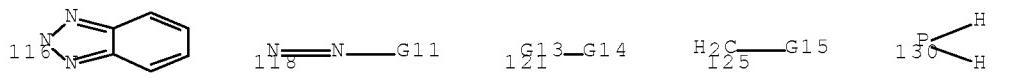
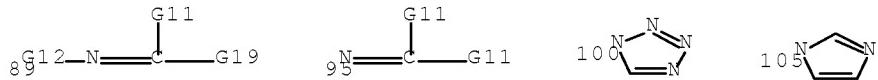
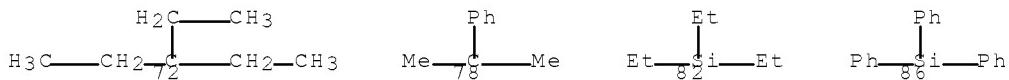
G5 = H / R  
 G6 = NH / O  
 G7 = NH<sub>2</sub> (opt. substd.)  
 G8 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Specifically claimed: Bu-n / Bu-i / Bu-t / pentyl / hexyl / heptyl / 45 / octyl / decyl / nonyl / dodecyl)



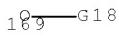
G9 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Specifically claimed: alkyl <containing 4-20 C>) / (Examples: Bu-t / C(Me)<sub>2</sub>CH<sub>2</sub>Me / 53 / 59 / CPh<sub>3</sub> / SiMe<sub>3</sub> / 63 / 67)



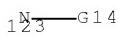
G10 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Examples: Bu-t / C(Me)<sub>2</sub>CH<sub>2</sub>Me / 72 / 78 / CPh<sub>3</sub> / SiMe<sub>3</sub> / 82 / 86 / 89 / 95 / 100 / 105 / 116 / 118 / NH<sub>2</sub> / 121 / OH / 125 / 130 / 133 / 136 / SH / 147 / 149 / 152 / 160)



G11 = H / alkyl / aryl / SiH3 (opt. subst.) / OH / 169



G12 = CH<sub>2</sub> (opt. subst.)  
 G13 = NH / 123 / O



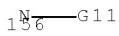
G14 = alkyl / aryl / SiH3 (opt. subst.) / OH / 171



G15 = OH / 127 / 139 / 142 / 145 / SH / 163 / NH<sub>2</sub> / 165



G16 = O / S / 156



G17 = NH / 167

167—G14

G18 = alkyl / aryl / SiH<sub>3</sub> (opt. substd.)  
G19 = H / alkyl / aryl / SiH<sub>3</sub> (opt. substd.) / OH / 173 /  
(Example: Ph)

173—G18

Patent location: claim 2  
Note: substitution is restricted

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

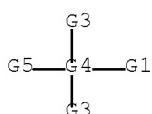
L17 ANSWER 24 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 123:343608 MARPAT Full-text  
TITLE: Organometallic acrylamide compositions, their preparation and their antimicrobial use  
INVENTOR(S): Babirad, Stefan Allan; Bigham, Wilson Stuart  
PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA  
SOURCE: Ger. Offen., 13 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19500310	A1	19950713	DE 1995-19500310	19950107
US 5639843	A	19970617	US 1994-180882	19940112
CA 2138914	A1	19950713	CA 1994-2138914	19941222

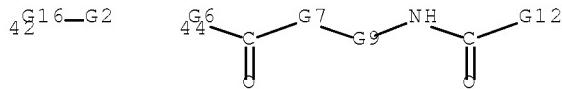
PRIORITY APPLN. INFO.: US 1994-180882 19940112

AB The compns. comprise the reaction product of an organometallic nucleophile and an azlactone. The products may be monomeric or polymeric and are useful for antifouling coatings. Thus, 4,4-dimethyl-2-vinylazlactone-Me methacrylate copolymer was treated with dimethylhydroxytin oleate in the presence of a catalyst to provide a product showing acrylamide characteristics in its IR spectrum. This material was used as an algicidal coating on asphalt shingles and was less prone to migration than a conventional tributyltin polymer composition

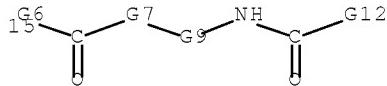
MSTR 1



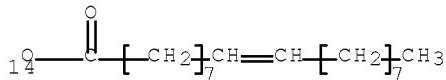
G1 = 42 / OH / SH / NH<sub>2</sub> / alkylamino /  
(Specifically claimed: 44)



G2 = OH / SH / NH<sub>2</sub> / alkylamino /  
(Specifically claimed: 15)



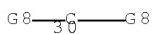
G3 = alkyl / aryl <containing 5-12 C>  
(opt. subst. by 1 or more G14) /  
heteroaryl <containing 5-12 atoms>  
(opt. subst. by 1 or more G14) / Me / (Examples: Bu-n / Ph)  
G4 = metal / (Specifically claimed: Sn / Ge)  
G5 = alkyl / aryl <containing 5-12 C>  
(opt. subst. by 1 or more G14) /  
heteroaryl <containing 5-12 atoms>  
(opt. subst. by 1 or more G14) /  
(Specifically claimed: 14) / (Examples: Bu-n / Ph / OH)



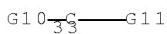
G6 = O / S / NH / 27



G7 = (0-1) 30

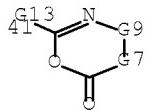


G8 = H / alkyl <containing 1-4 C> / (Example: Me)  
G9 = 33 / cycloalkylene <containing 4-12 C,  
attached through 1 C>



G10 = alkyl (opt. subst. by 1 or more aryl) /  
cycloalkyl / aryl <containing 5-12 C> (opt. subst.) /  
heteroaryl <containing 5-12 atoms> (opt. subst.) /  
(Example: Me)

G11 = alkyl (opt. subst. by 1 or more aryl) /  
       cycloalkyl / (Example: Me)  
 G12 = R <"terminal group" > / 41



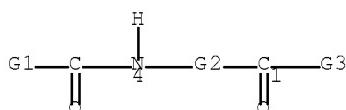
G13 = R <"optionally substituted multivalent binding  
       group not reactive with the azalactone">  
 G14 = R / (Examples: aryl (subst. by alkyl <containing  
           1-4 C>) / alkyl <containing 1-4 C>  
           (substd. by 1 or more aryl) / alkoxy <containing 1-4 C> /  
           dialkylamino <each alkyl containing 1-4 C> / NO<sub>2</sub> / CN /  
           halo / alkoxycarbonyl <containing 1-4 C>)  
 G15 = alkyl <containing 1-4 C>  
 G16 = (1-4) CH<sub>2</sub>  
 Patent location: claim 2  
 Note: also incorporates claim 5

L17 ANSWER 25 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 121:238462 MARPAT Full-text  
 TITLE: surface coating of surgical filaments with acylamino  
       acid polyvalent salts to improve smoothness  
 INVENTOR(S): Shinoda, Norimasa; Ootaguro, Masazo; Funae, Akihiro;  
               Iimuro, Shigeru  
 PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06181978	A	19940705	JP 1992-340137	19921221
PRIORITY APPLN. INFO.:			JP 1992-340137	19921221

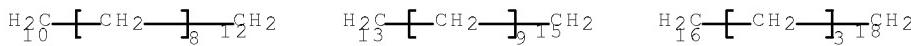
AB The surface of bioabsorbable filaments (sutures) for surgical use is coated  
       with acylamino acid polyvalent salts (filament: acyl amino acid polyvalent  
       salt = 100: 1-20wt. parts). The filaments showed improved surface smoothness  
       under wet conditions.

MSTR 1B

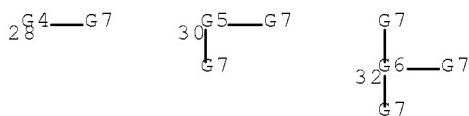


G1 = alkyl <containing 7-21 C> (opt. subst. by OH) /

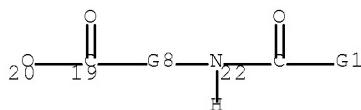
G2      alkenyl <containing 7-21 C>  
       = CH2 / CH2CH2 / CH2CH2CH2 / 16-4 18-1 / 10-4 12-1 /  
           13-4 15-1



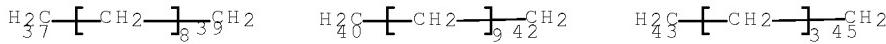
$$G_3 = 28 / 30 / 32$$



G4 = metal / (Examples: Ca / Zn / Fe / Mg)  
G5 = metal / (Examples: Al / Fe / Ti)  
G6 = metal / (Examples: Ge / Ti)  
G7 = OH / 20



G8 = 37-19 39-22 / 40-19 42-22 / 43-19 45-22



Patent location: claim 1

L17 ANSWER 26 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 120:307098 MARPAT Full-text  
TITLE: Water- and oil-repellent powders containing acyl amino acid polyvalent metal salts coated with fluorine compounds and cosmetics containing the powders  
INVENTOR(S): Kashimoto, Akio; Kyomasu, Ayumi; Yano, Shinji; Takada, Hiroshi  
PATENT ASSIGNEE(S): Kao Corp, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

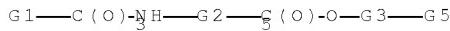
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05339127	A	19931221	JP 1992-153714	19920612
JP 3167422	B2	20010521		

PRIORITY APPLN. INFO.:

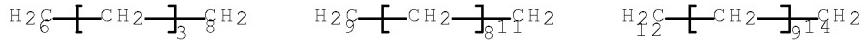
JP 1992-153714 19920612

AB Cosmetics contain powders contg. [RCONH(CH<sub>2</sub>)<sub>x</sub>CO<sub>2</sub>]nM(OH)m-n (R = C<sub>7</sub>-21 straight-chain or branched alkyl, alkenyl, hydroxyalkyl; x = 1, 2, 3, 5, 10, 11; M = polyvalent metal; m = valence of M; n = 1-4) coated with F compds. N-lauroyl-β-alanine Ca salt (50 g) (preparation from N-lauroyl-β-alanine and CaCl<sub>2</sub> given) was mixed with 2.42 g 1:1 mixture of C<sub>8</sub>F<sub>17</sub>(CH<sub>2</sub>)<sub>2</sub>P(O)(OH)<sub>2</sub> and [C<sub>8</sub>F<sub>17</sub>(CH<sub>2</sub>)<sub>2</sub>]<sub>2</sub>P(O)OH and 500 g iso-Pr alc. at 60° for 4 h, evaporated, and dried to give 51 g powder. A cosmetic foundation containing 20 weight% the powder was formulated.

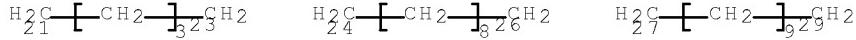
MSTR 1B



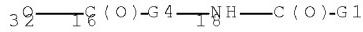
G1 = alkyl <containing 7-21 C> (opt. substd. by OH) /  
alkenyl <containing 7-21 C>  
G2 = CH<sub>2</sub> / CH<sub>2</sub>CH<sub>2</sub> / CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub> / 6-3 8-5 / 9-3 11-5 /  
12-3 14-5



G3 = metal / (Examples: Ca / Zn / Mg / Fe)  
G4 = 21-16 23-18 / 24-16 26-18 / 27-16 29-18



G5 = OH / 32



Patent location: claim 1

L17 ANSWER 27 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

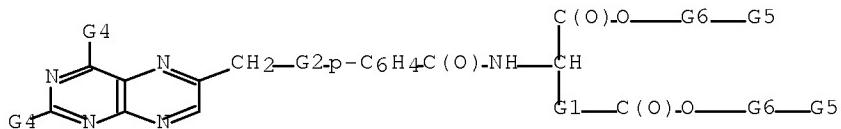
ACCESSION NUMBER: 118:132126 MARPAT Full-text  
TITLE: Treatment of psoriasis with methotraxate metal salts  
INVENTOR(S): Loev, Bernard  
PATENT ASSIGNEE(S): Chemex Pharmaceuticals, Inc., USA  
SOURCE: U.S., 6 pp. Cont. of U.S. Ser. No. 404,424, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5166149	A	19921124	US 1991-713558	19910610
US 5292731	A	19940308	US 1992-916432	19920721
PRIORITY APPLN. INFO.:			US 1989-404424	19890908
			US 1991-713558	19910610

AB Metal salts of methotrexate or of its analogs and derivs. (Markush given), are drugs for the treatment of psoriasis and hyperproliferative disorders (no data). A topical solution comprised Zn methotrexate 0.1-10.0, triethanolamine 0.1-10.0, propylene glycol 1.0-5.0, preservative 0.1-0.3, and water 74.7-98.7% by weight

MSTR 2



G1 = (0-4) CH<sub>2</sub>  
 G2 = NH / 20

<sub>2</sub>N—G3

G3 = alkyl <containing 1-5 C> /  
     (Specifically claimed: Me)  
 G4 = NH<sub>2</sub> / alkylamino <containing 1-5 C> /  
     dialkylamino <each alkyl containing 1-5 C>  
 G5 = R <"anion"> / (Examples: Cl / OSO<sub>3</sub>H / OPO<sub>3</sub>H<sub>2</sub> / 32)

<sub>3</sub>O—NO<sub>2</sub>

G6 = metal / (Specifically claimed: Zn / Cu / Cd / Mn)  
 Patent location: claim 1

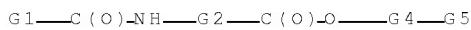
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 28 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 116:91143 MARPAT Full-text  
 TITLE: Pigment consisting of polyvalent metal salt of acylated amino acid or amidosulfonic acid and cosmetic composition containing the same  
 INVENTOR(S): Shinohara, Ryutaro; Nozaki, Toshio; Tachizawa, Osamu  
 PATENT ASSIGNEE(S): Kao Corp., Japan  
 SOURCE: Eur. Pat. Appl., 41 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

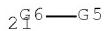
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 455018	A1	19911106	EP 1991-105803	19910411
EP 455018	B1	19940907		
R: DE, FR, GB				
JP 03294210	A	19911225	JP 1990-95328	19900411
JP 06102606	B	19941214		
JP 04005216	A	19920109	JP 1990-108233	19900424
JP 2887499	B2	19990426		
US 5167709	A	19921201	US 1991-683153	19910410
PRIORITY APPLN. INFO.:				
			JP 1990-95328	19900411
			JP 1990-108233	19900424

AB A pigment consisting of a polyvalent metal salt of an amidosulfonic acid [RCON(R1)XSO<sub>3</sub>]<sub>n</sub>M(OH)<sub>m-n</sub> (I; R = C<sub>7-21</sub> alkyl, alkenyl, hydroxyalkyl; R<sub>1</sub> = H, Me; X = ethylene, propylene, etc.; M = polyvalent metal; m = valence of M; n = 1-4) or an amino acid analog of I is prepared and used in cosmetics. N-Palmitoyltaurine Ca (I) was prepared by reaction of N-palmitoyltaurine Na with CaCl<sub>2</sub>. A face powder contained I 50, TiO<sub>2</sub> 0.5, red iron oxide 0.1, liquid paraffin 1, perfume 0.1%, and talc for the balance.

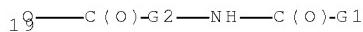
MSTR 2B



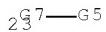
G1 = alkyl <containing 7-21 C>  
      (opt. subst. by 1 or more OH) / alkenyl <containing 7-21 C>  
 G2 = G3 / G8  
 G3 = (3-5) CH<sub>2</sub>  
 G4 = metal / 21 / (Examples: Ca / Zn / Mg / Fe / Ba)



G5 = OH / 19



G6 = metal / 23 / (Examples: Al / Fe / Ti)



G7 = metal / (Examples: Ti / Zr)  
 G8 = (10-11) CH<sub>2</sub>  
 Patent location: claim 5

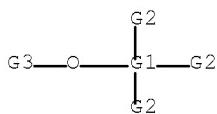
L17 ANSWER 29 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 115:218778 MARPAT Full-text  
 TITLE: Inorganic-organic or semiconductor composites, their preparations, and electrophotographic photoconductor

INVENTOR(S): containing them  
 Yamamoto, Kohichi; Nakamura, Shigetoshi  
 PATENT ASSIGNEE(S): Fuji Xerox Co., Ltd., Japan  
 SOURCE: Ger. Offen., 37 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4010328	A1	19901004	DE 1990-4010328	19900330
DE 4010328	C2	19980129		
JP 02258839	A	19901019	JP 1989-78530	19890331
JP 02258840	A	19901019	JP 1989-78531	19890331
JP 2576065	B2	19970129		
JP 02258841	A	19901019	JP 1989-78532	19890331
JP 02258842	A	19901019	JP 1989-78533	19890331
JP 2576066	B2	19970129		
JP 02259767	A	19901022	JP 1989-78529	19890331
JP 07120051	B	19951220		
JP 02259765	A	19901022	JP 1989-78534	19890331
US 5168024	A	19921201	US 1990-501841	19900330
PRIORITY APPLN. INFO.:				
			JP 1989-78529	19890331
			JP 1989-78530	19890331
			JP 1989-78531	19890331
			JP 1989-78532	19890331
			JP 1989-78533	19890331
			JP 1989-78534	19890331

**AB** Inorg.-org. composites or semiconductor composites are claimed which are prepared by polycondensation of  $\geq 1$  metal alkoxide by the sol-gel method in the presence of an organic compound, where the metal alkoxide is selected from the group of  $X_1M_1(OR_1)(OR_2)$ ,  $X_1M_2(OR_1)(OR_2)(OR_3)$ , and  $X_1M_2(OR_1)(OR_2)X_2$  or  $X_1OM_1(OR_1)(OR_2)$ ,  $X_1OM_2(OR_1)(OR_2)(OR_3)$ , and  $X_1OM_2(OR_1)(OR_2)X_2$  [M1 = trivalent metal; M2 = tetravalent metal, C; R1-R3 = H, alkyl,  $\geq 1$  of R1-R3 is C1-6 alkyl; X1, X2 = alkyl, aryl, aralkyl, acyl, heterocyclic, unsatd. hydrocarbyl; X1 and X2 together may form a ring]. The organic compound has affinity to the metal alkoxide . An electrophotog. photoconductor with a charge-transporting layer from the above composite, where the specified organic compound is a charge-transporting agent, is also claimed.

MSTR 5A



G1 = C / metal / (Specifically claimed: Si / Ge / Sn / Ti / Zr)  
 G2 = OH / 1 or more alkoxy <containing 1-6 C>  
 G3 = alkyl <containing 5 or more C> (opt. subst.) / aryl (opt. subst.) / aralkyl (opt. subst.) / acyl / heterocycle (opt. subst.) / hydrocarbyl (opt. subst.) /

(Examples: Ph / 7 / COPh / cyclohexyl / 9 / 14 / 19 / 22)



G4 = CH2Ph / Ph

Patent location: claim 1

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 30 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 112:139735 MARPAT [Full-text](#)

TITLE: 2,2-Disubstituted glycerol and glycerol-like compounds as antiinflammatories and platelet activating factor (PAF) antagonists

INVENTOR(S): Solomon, Daniel M.; Kaminski, James J.; White, Steven K.; Lehman, Laura S.; Ganguly, Ashit K.

PATENT ASSIGNEE(S): Schering Corp., USA

SOURCE: Eur. Pat. Appl., 101 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 327962	A1	19890816	EP 1989-101794	19890202
R: ES, GR				
WO 8907099	A1	19890810	WO 1988-US315	19880205
W: AT, AU, BB, BG, BR, CH, DE, DK, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SD, SE, SU, US				
RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 8812946	A	19890825	AU 1988-12946	19880205
WO 8907100	A1	19890810	WO 1989-US336	19890202
W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US				
RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 8931918	A	19890825	AU 1989-31918	19890202
EP 398990	A1	19901128	EP 1989-902853	19890202
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 03501612	T	19910411	JP 1989-502646	19890202
JP 06062542	B	19940817		
DK 9001857	A	19901004	DK 1990-1857	19900803
JP 07165739	A	19950627	JP 1994-16152	19940210
JP 07179406	A	19950718	JP 1994-16159	19940210
PRIORITY APPLN. INFO.:			WO 1988-US315	19880205
			WO 1989-US336	19890202

GI For diagram(s), see printed CA Issue.

AB Title compds. R<sub>1</sub>OCH<sub>2</sub>CR<sub>2</sub>R<sub>3</sub>CH<sub>2</sub>R<sub>4</sub> [I; R<sub>1</sub> = alkyl, CONR<sub>5</sub>R<sub>6</sub>; R<sub>5</sub> = H, alkyl, aryl, etc.; R<sub>6</sub> = alkyl, aryl, etc.; R<sub>5</sub>R<sub>6</sub>N = heterocyclyl; R<sub>2</sub> = alkyl, CF<sub>3</sub>, aralkyl, aryl; R<sub>3</sub> = XCmHm+1; X = CH<sub>2</sub>, O, NR<sub>7</sub>, SOn; m = 1-6; n = 0,1; R<sub>7</sub> = H, alkyl, acyl; R<sub>4</sub> = TUV; T = OPO<sub>3</sub>, OC<sub>2</sub>O, O, S, NR<sub>7</sub>, OCONR<sub>7</sub>, NR<sub>7</sub>CO<sub>2</sub>; U = (CH<sub>2</sub>)<sub>l</sub> (l = 2-10), (CH<sub>2</sub>)<sub>k</sub>C<sub>6</sub>H<sub>4</sub>(CH<sub>2</sub>)<sub>k</sub> (k = 1-3); V = AZ, Z = bond, O, S, O(CH<sub>2</sub>)<sub>o</sub> (o = 1-3), OC<sub>2</sub>O, NR<sub>7</sub>; A = alkyl, heteroaryl, etc.; with the proviso that when R<sub>1</sub> = alkyl, T ≠ OPO<sub>3</sub>] are prepared, e.g. by (1) reaction of R<sub>1</sub>OCH<sub>2</sub>CR<sub>2</sub>R<sub>3</sub>CH<sub>2</sub>TUL<sub>1</sub> (II) and L<sub>2</sub>Z<sub>A</sub> (L<sub>1</sub>, R<sub>2</sub> = leaving group), (2) reaction of R<sub>1</sub>OCH<sub>2</sub>CR<sub>2</sub>R<sub>3</sub>CH<sub>2</sub>O<sub>2</sub>CL<sub>1</sub> and L<sub>2</sub>OUV for I (T = OC<sub>2</sub>O), and (3) N-alkylation of H<sub>2</sub>NCO<sub>2</sub>CH<sub>2</sub>CR<sub>2</sub>R<sub>3</sub>CH<sub>2</sub>R<sub>4</sub> for I (R<sub>1</sub> = CONHR<sub>6</sub>; R<sub>6</sub> = alkyl). Treatment of n-C<sub>18</sub>H<sub>37</sub>NMeCO<sub>2</sub>CH<sub>2</sub>CMe(OMe)CH<sub>2</sub>O(CH<sub>2</sub>)<sub>17</sub>OSO<sub>2</sub>Me (preparation given) with thiazole in the presence of Bu<sub>4</sub>N<sup>+</sup>I<sup>-</sup> gave a thiazolinium compound III. III at 50 μM showed 100% inhibition of PAF-induced platelet aggregation. Pharmaceutical formulation examples are given.

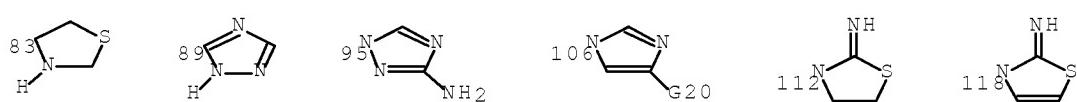
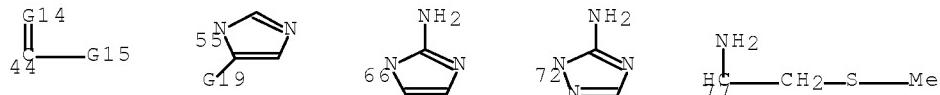
MSTR 3A

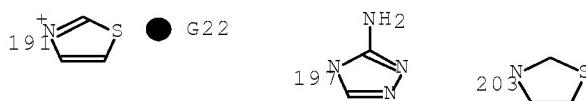
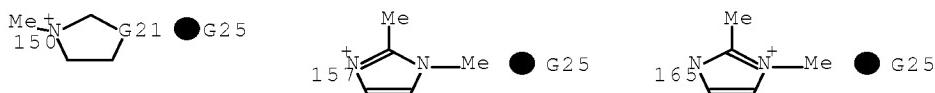
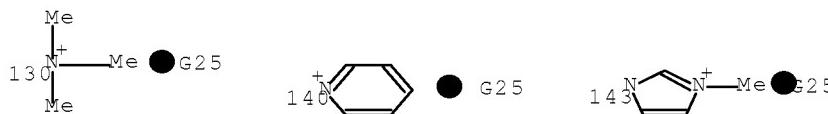
2<sup>G1</sup>—G12—3<sup>G13</sup>

G1 = R <"leaving group"> / (Examples: H / metal)  
 G6 = alkyl <containing 1-6 C> /  
     alkylcarbonyl <containing 1-20 C> /  
     cycloalkylcarbonyl <containing 3-8 C>  
 G12 = O / 210-207 211-38 / NH / 212

2<sup>G10</sup>—Z<sup>G11</sup>—O)      2<sup>N</sup><sub>12</sub>—G6

G13 = alkyl <containing 1-20 C> (opt. substd.) /  
 R <"optionally substituted heteroalkyl"> /  
 heterocycle <containing 1-3 heteroatoms, zero or more O,  
 zero or more S, zero or more N (no other heteroatoms),  
 3- to 7-membered monocyclic ring> (opt. substd.) /  
 aryl <containing 6-14 C> / heteroaryl <containing 1-4  
 heteroatoms> (opt. substd.) / ¶44 /  
 (Specifically claimed: 55 / 66 / 3-pyridyl / 72 / 83 / 77 /  
 89 / 95 / 191 / 106 / 112 / pyrrolidino / morpholino / 118 /  
 197 / 203 / 130 / 140 / 143 / 150 / 157 / 165) /  
 (Example: Ph)

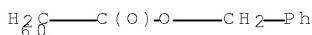




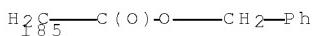
G14 = O / S / NH / 46



G15 = NH<sub>2</sub> / alkylamino <containing 1-6 C> /  
      dialkylamino <each alkyl containing 1-6 C>  
G16 = alkyl <containing 1-6 C> / CN  
G19 = H / CH<sub>2</sub>CO<sub>2</sub>H / 60



G20 = CH<sub>2</sub>CO<sub>2</sub>H / 185



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G21      = S / CH2
G22      = R <"anion , ch(1)-"> / bromide /
            (Examples: chloride / methanesulfonate)
G25      = R <"anion, ch (1)-"> / (Examples: chloride /
            methanesulfonate)
```

Patent location: claim 1

L17 ANSWER 31 OF 31 MARPAT COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 111:62866 MARPAT Full-text  
TITLE: Manufacture and use of monodisperse ceramic powder  
INVENTOR(S): Rinn, Guenter; Nass, Ruediger  
PATENT ASSIGNEE(S): Fraunhofer-Gesellschaft zur Foerderung der Angewandten  
Forschung e.V., Fed. Rep. Ger.  
SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 314166	A1	19890503	EP 1988-118004	19881028
EP 314166	B1	19930505		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DE 3736686	A1	19890511	DE 1987-3736686	19871029
JP 02022105	A	19900125	JP 1988-267310	19881025
US 5049371	A	19910917	US 1988-263883	19881028
AT 88983	T	19930515	AT 1988-118004	19881028
DE 1987-3736686 19871029				
EP 1988-118004 19881028				

PRIORITY APPLN. INFO.:

AB Particulate oxides and hydroxides are manufd. by converting hydrolyzable compds. with water in an organic solvent containing a complexing agent. The process further comprises separating and optionally purifying the resulting precipitate, and calcinating the precipitate. The powders are useful for the manufacture of ceramics and catalyst supports. This process permits the reproducible manufacture of monodisperse oxides and hydroxides with controllable particle size. Thus, 40 mL 1M ethanolic Zr(Me<sub>2</sub>CHO)<sub>4</sub> was mixed with 20 mL 5% ethanolic hydroxypropylcellulose and 10 mL EtOH in 4 sep. operations. To each mixture was added 2.1 mL 65% HNO<sub>3</sub> and 0.6 mL water, and 1.2, 1.6, 2.0, or 2.4 g acetylacetone. After drying at 100°, the resulting ZrO<sub>2</sub> ppts. had average particle diameter 0.6, 1.0, 1.5, and 2.5 µm. Calcination at 700° resulted in a decrease of the diameter by 40%.

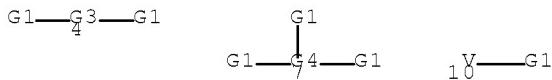
MSTR 3A

G1—G2

G1 = halo / carbon chain (opt. substd. by 1 or more G6) /  
 23 / 27

<sub>23</sub><sup>67</sup>—G8      <sub>29</sub>—C(=O)—G8

G2 = 4 / 7 / 10



G3 = Al / V / Ti / U / B  
 G4 = V / Ti / Zr / Hf / Sn / U / Si  
 G6 = halo / alkoxy / NO<sub>2</sub> / dialkylamino  
 G7 = O / NH / 30

G8 = carbon chain (opt. subst, by 1 or more G6)  
 Patent location: disclosure

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 L3 5 SEA FILE=REGISTRY SSS FUL L1  
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CA SUBSCRIBER PRICE	-24.18	-30.74

SESSION WILL BE HELD FOR 120 MINUTES  
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